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MID-LIFE ATTAINMENT OF THE MENTALLY RETARDED, A LONGITUDINAL STUDY.

BY- BALLER, WARREN R. AND OTHERS
NEBRASKA UNIV., LINCOLN

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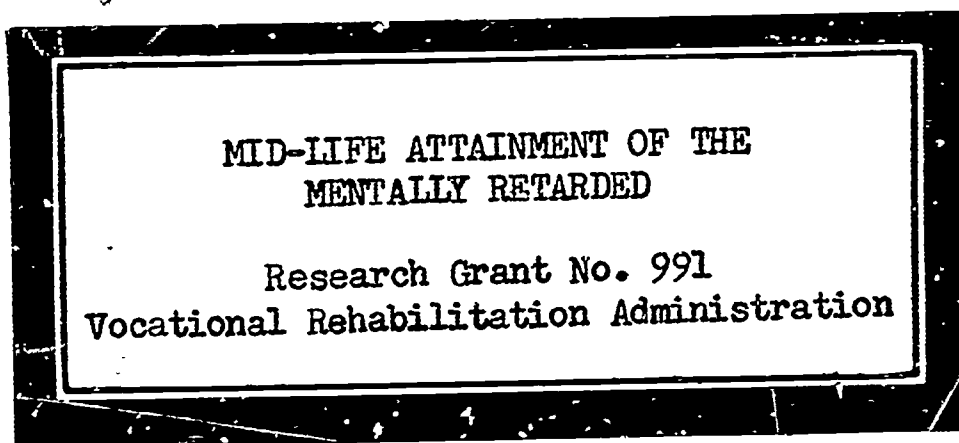
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DESCRIPTORS- *EXCEPTIONAL CHILD RESEARCH, *MENTALLY HANDICAPPED, *ADJUSTMENT (TO ENVIRONMENT), LONGITUDINAL STUDIES, CASE RECORDS, ECONOMIC STATUS, EMPLOYMENT LEVEL, FOLLOWUP STUDIES, MARITAL STATUS, SLOW LEARNERS, SOCIAL STATUS,

THIS STUDY LOCATED MENTALLY RETARDED, SLOW LEARNING, AND NORMAL SUBJECTS WHO HAD BEEN EVALUATED DURING THE 1930'S. THEIR PRESENT STATUS AND FUNCTIONING WERE REPORTED AND THE STUDY SEARCHED FOR REASONS FOR THE SUBJECTS' DIFFERENT LEVELS OF LIFE ADJUSTMENT. OVER 400 OF THE ORIGINAL SUBJECTS WERE LOCATED. THEY WERE IN THEIR MIDDLE FIFTIES AT THE TIME OF THIS STUDY. EACH SUBJECT WAS INTERVIEWED OR RESPONDED TO A LIFE HISTORY QUESTIONNAIRE. SOCIAL STATUS WAS EVALUATED. A SAMPLE WERE GIVEN INTELLIGENCE TESTS. RESULTS INDICATED THAT THE MENTALLY RETARDED GROUP HAD A HIGHER DEATH RATE THAN THE OTHER TWO GROUPS. THE MENTALLY RETARDED GROUP MEMBERS WERE MORE LIKELY TO LIVE ALONE AND ALSO HAD A HIGHER DIVORCE RATE. ALTHOUGH THE MENTALLY RETARDED GROUP HAD SHOWN STEADY IMPROVEMENT IN SELF SUPPORT OVER THE YEARS, THEIR UNEMPLOYMENT RATE WAS STILL ABOVE THE NATIONAL AVERAGE. ALL GROUPS WERE GENERALLY LAW ABIDING. THOSE SUBJECTS IN THE MENTALLY RETARDED GROUP TENDED NOT TO PARTICIPATE AS MUCH SOCIALLY AS SUBJECTS IN THE OTHER TWO GROUPS. NO SIGNIFICANT GAINS IN INTELLIGENCE HAD BEEN MADE BY ANY GROUP. THE LOW GROUP HAD HAD FEWER DESIRABLE EXPERIENCES. CASE STUDIES OF SUCCESSFUL (FOUR MALES, FOUR FEMALES) AND UNSUCCESSFUL (FOUR MALES, FOUR FEMALES) SUBJECTS FROM THE LOW GROUP ARE PRESENTED. FACTORS RELATING TO THEIR SUCCESSFUL AND UNSUCCESSFUL LIFE ADJUSTMENTS ARE DISCUSSED. RECOMMENDATIONS ARE MADE ABOUT THE MENTALLY RETARDED AND ABOUT FURTHER RESEARCH. QUESTIONNAIRES USED ARE REPRODUCED. DATA IS PRESENTED IN 120 TABLES. THE BIBLIOGRAPHY LISTS 33 ITEMS. THIS PAPER WAS PUBLISHED AS AN ARTICLE IN GENETIC PSYCHOLOGY MONOGRAPHS, VOLUME 75, SECOND HALF, PAGES 235-329, MAY 1967.
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MID-LIFE ATTAINMENT OF THE MENTALLY RETARDED

A Longitudinal Study

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by

**Warren R. Baller
University of Nebraska**

**Don C. Charles
Iowa State University**

**Ebert L. Miller
Ball State University**

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20201.**

**University of Nebraska
Lincoln, Nebraska
68508**

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PREFACE

The question, "What becomes of persons who during childhood and youth were identified as mentally retarded?" has for years been a persistent one. It is the question that prompted the first in a series of researches dating back to 1934 (Haller, 1935), which researches have been brought up to date in the present report. As will be indicated in Chapter 1, the focus of interest where these individuals are concerned, has shifted in certain important ways since the publishing of the first study.

The major endeavor in the earlier studies of the series was largely that of securing information about location, economic status, and social adjustment. No real attempt was made to identify factors that could be shown to be importantly correlated with the way in which individuals manage to fare economically, socially, and otherwise. The present research not only was planned to update information about the conditions and factors reported in the early researches, but to go beyond these kinds of description to the question of the antecedents of the changes apparent in the lives of the members of the several groups.

The authors have tried to make it clear in the pages that follow that what has been referred to as identification of antecedents implies more than simply the uncovering of factors related to the changes in the lives of the subjects. They have hoped that it would be possible to draw from the various kinds of available life history information some over-arching generalizations that in some measure at least might articulate with theory of human development and behavior derived from the study of "normal" persons. Perhaps the present research will

provide a beginning along these lines--enough of a beginning to suggest some features that may be incorporated into the plans that other researchers make for studies of the lives of the mentally retarded.

The authors are conscious of numerous debts which they owe to colleagues and other persons for help given in the research. Certainly the study could not have been done at all without the cooperation of the several hundred individuals who were members of the three different subject groups. If any of them should learn of this report, it is hoped that he will sense the authors' appreciation for his part played in the study. He should know also that every effort has been made to guarantee complete confidentiality; the name of none of the subjects of the study is given in any part of the report or divulged in any other way.

Above all the authors are appreciative of the generous financial support received from the Vocational Rehabilitation Administration of the U. S. Department of Health, Education and Welfare. In addition to the grant of money from the agency the Vocational Rehabilitation Administration provided much valuable counsel regarding the conduct of the study.

The administrative officers and many teachers of the Lincoln Public Schools have supplied invaluable assistance not only in the present study but in this study's predecessors. Similar acknowledgment is made of the cooperation received from numerous social agencies, court officers, and bureaus of vital statistics. Special indebtedness is expressed to members of the Office of the Social Security Administration. Without the help which they gave much valuable data could not have been secured.

Appreciation is also extended to the staff of research assistants, clerical assistants, and stenographers who helped with the gathering of information, tabulation of results, and the preparation of the report. Included among these persons were Roberta Beaird, Frank Milhollan, Tom Osborne, and Leon Scott--all of whom since their participation in the research, have completed the doctorate degree--and Mr. David Converse, Mr. Tom Keefe, Mr. Dean Bryson, and Mr. Angelo Bolea. In the preparation of a research report there are many details which only an able secretary and typist can handle well. For her competent assistance with the manuscript and related tasks we wish to thank Miss Sharon Irmer.

Lincoln, Nebraska

W.R.B.

Ames, Iowa

D.C.C.

Muncie, Indiana

E.L.M.

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Chapter 1

PURPOSE AND BACKGROUND OF THE STUDY

The present research originated in a study conducted by Baller (Baller, 1936) in 1935. The subjects were 206 individuals who had been in the "Opportunity Rooms" of the Lincoln, Nebraska, public schools from the time of classification until the termination of their public school education. Each individual had been classified as mentally deficient on the basis of an individual intelligence test score of 70 I.Q. or below and failure to do acceptable work in the regular school classes. For more than three-fourths of the individuals, there were at least two individual mental test ratings on file with no rating above 70 I.Q. These persons were matched on the basis of sex, race, ethnic origin, and age with control individuals whose I.Q.'s ranged from 100 to 120 on the Terman Group Test of Mental Ability. Baller completed family and individual subject interviews as well as investigations of court and social agency records.

In 1953 Charles (Charles, 1953) reported a follow-up study on 151 of the subnormal group identified in Baller's research. The subjects were again studied in 1961-62 by Miller (Miller, 1962).

A different group of individuals whose I.Q.'s ranged from 75 to 85 were studied by Baller in 1937 (Baller, 1939). There were 307 persons who comprised this "dull" group.

By the early 1960's the subjects of the studies just mentioned were well into mid-life with average age in the fifties. Presumably they had become what they were to be as mature adults.

Purpose and Rationale of the Study

While there is extensive literature pertaining to mental deficiency, most of it is concerned with diagnosis, etiology, and situational problems (e.g., educational practices). To the question, "What becomes of retarded children?", there have been few answers supported by evidence. Available evidence has derived from the research above mentioned and a very limited number of other longitudinal studies. These efforts, productive as they have been, are primarily descriptive and have not dealt much with causation. It is one thing for a study to supply information about how certain persons over a period of time have fared economically, socially, and in other ways; it is another thing for the study to furnish some understanding about the "whys" that reside behind moderately satisfactory, poor, or good adjustment of the individuals who comprise the study group. Hopefully the research now to be reported can with more effectiveness than the related, earlier studies piece together the data that tell about the "whys." Such a hope prompted the effort to bring up to date the records covering nearly thirty years of the life span of the persons who comprised the Baller, Charles, and Miller studies.

Herein as indicated lay the purpose and plan of the research. The population samples were to be located and the attendant social and economic conditions examined in a manner similar to that of the earlier studies--with increased attention to factors seemingly associated with change. It was assumed on the basis of previous findings that diverse patterns of adjustment from very good to poor would be discovered. Of prime importance would be evidence of the predominance of certain kinds of factors where particularly noteworthy alterations of "life style" had occurred.

Experiential antecedents of good and poor adjustment were to be inferred from current interviews and other sources, and from an examination of data collected for the earlier studies. Broadly described, such antecedents would include 1) formal training experiences at different periods during the life of the individual, 2) family and neighborhood influences, 3) employment experiences, 4) economic factors, 5) conditions of health and physical attributes, and 6) circumstances related to marriage (whether e.g., the individual married into an improved economic and/or social situation). As already implied, the antecedents would be analyzed intensively for the presence of especially influential (i.e., particularly significant) persons, school episodes, work experiences, self-discoveries, and other factors that seemed to be strongly emphasized by the respondents. Repeated emphasis upon a given kind of influence--or kinds of influence--might provide the clue for some firming up of conceptualizations (theorizing) regarding the factors related to change in mentally retarded persons.

The identification of antecedents as mentioned above obviously has value for persons who work with retarded individuals. From such identification educational and social planning might be expected to improve, thus opening the way to better chances for successful development and adjustment on the part of the mentally retarded; deleterious influences might be more easily noted and dealt with.

To summarize: It was the purpose of this study to 1) locate the subjects of mentally retarded, dull, and comparison groups originally studied in early life in the middle and late 1930's; 2) study the present status and functioning of these persons; and 3) with the aid of records and interviews, to identify the principal causes of varying levels of life adjustment.

Review of Relevant Research

While research in any discipline does not proceed in clearly defined stages, there are gradually changing emphases which may be discerned. In behavioral science the emphases may be described as moving from description to the search for relationships (with "causation" an ultimate goal) and finally to the formulation of generalizations amenable to rigorous testing.

Most developmental research related to mentally retarded persons has been descriptive or relationship oriented; such research has made possible identification of some broad cause-effect relationships. In the following section some generalizations about the "causes" of behavior will be stated in connection with representative research. The intention will be to identify researches that afford the bases upon which to examine the relationship between the major findings of the present study and 1) current theory regarding self-concept formation, 2) vocational choice, and 3) the correlation between personality development and the course of intellectual development. While much of the response data is admittedly subjective and retrospective, the authors believe that the findings of the study will have added meaning if they can be assessed in the light of well regarded theory in the areas just mentioned.

Psychological Atmosphere of the Home

The importance to the individual of the psychological atmosphere of the home cannot be overemphasized. There is much published research to support this assertion (Sears, Maccoby, Levin, 1957, e.g.). Patterns of parental behavior in the home appear to be major influences in the development of the personality patterns of children (Baldwin, Kalhorn

and Breese, 1945). Presence or absence of a mother figure in early life and the nature and extent of contact with such a person appears to be a vital factor in personality development. Institutionalization early in life, something not uncommon for many retarded and deficient children, has many inherent hazards to good development (although a good institution may be far better than a bad home). (Bowlby, 1952, O'Connor, 1956) Granting the fundamental importance of the home's psychological atmosphere on children in general, there are obvious reasons for emphasizing the need for data regarding the home and the parental influence in a study of the life of the mentally retarded.

Influences of the General Culture

Outside the family, the principal influence on the developing person is the general culture surrounding him and more particularly the "sub-culture" of neighborhood, socio-economic class, race, and the like. (Warner, 1953) Do any agents, as well as agencies of the individual's social-cultural milieu "stand out" after a period of years as being related in an especially significant way to his development?

Educational Experience

The nature and influence of the child's educational experiences are of acknowledged importance. The education of the retarded person has, if anything, even greater potential impact on his development than the education of average and bright individuals. Research on this topic is extensive. (See bibliography in Kirk and Johnson, pp. 361-417) The question with which the preceding paragraph ended may be adapted to the relevance of the school to the life of the mentally retarded person.

Selection and Influence of Work Choice

As the child develops into adolescence and maturity, the kind of work experiences he has (or does not have) gains in importance. Literature related to work choice is therefore relevant. There are many theories of vocational choice. In general these theories may be grouped under three headings according to their different emphases on 1) the internal (personality characteristics of the individual), 2) the external (socio-economic conditions), or 3) the complex interaction of both 1) and 2). Since there seems to be insufficient evidence that either personality factors or sociological factors predominately determine an individual's occupation, the third mentioned theory--based on complex interaction of sociological, economic, psychological and chance factors--invites selection for the present purposes.

Super in his theory of vocational choice development cautions against overly simplified emphases upon the influence of personality traits or factors as primary determinants of occupational choice; especially when occupations have not been "sufficiently, narrowly and precisely defined." This quotation follows the statement, "Personality traits seem to have no clear-cut and practical significant differential relationship to vocational preference, entry success, or satisfaction." (Super, 1957, 240-241.)

As he reviews different psychological and sociological formulations of human development and adjustment, Super builds the case for viewing an individual's involvement in occupational selection and the ensuing experiences as dependent upon the functioning of synthesis, the interplay (acting together) of various factors. Vocational development is defined in Super's theory as an interaction process in which an individual is

confronted with decisions as to tasks and related opportunities, decisions which result from a combination of his own personality traits, the social demands and expectations with which he interacts, and the economic forces which operate in his environment. Out of this interaction a sense of identity or self-concept develops. Thus choice of an occupation becomes in considerable measure an attempt to find fulfillment of a self-concept. (Super and Bachrach, 1957)

As individuals move into maturity and beyond, according to Super, career patterns become increasingly discernible. Miller and Form (1951) identified six specific career patterns. Super later reduced these to four: 1) stable, direct progress from training to a single type of work consistently followed, 2) conventional, typical progress through all of the life stages, 3) unstable, a period of trial, then stability, then trial again, the sequence repeated often, and 4) multiple trial, a life-long sequence of trials in which no period of stability occurs.

Since in our society so much of social acceptability, life-satisfaction and adequate self-image derives from occupational involvement, the work life should be studied intensively not only for persons of normal and above normal mentality, but also for those in low ability populations. At least an attempt should be made to examine the extent to which the components of a theory such as that of Super throw helpful light upon the development and adjustment of the person of limited mentality. Not as a postscript but as a matter of considerable relevance, special attention should be paid to the influences of chance factors, especially those of a social and personal nature, on early choice of occupation and on patterns of life work (Super, 1957, pp. 276-

(C) 1957, 1958

280 as well as the place of disabilities in vocational development.
(Super, 1957, pp. 271-275)

Lives of the Retarded: Longitudinal Studies

Attempts to determine the fate of retarded children have resulted in a number of longitudinal studies of varying intensity and duration. Summaries of most of the studies completed up to the middle 1950's have been reported by Tizard. (Tizard, 1958) The impression to be gained from the twenty-five studies which Tizard reviewed is generally an optimistic one. In his conclusions Tizard comments, "It is apparent from what has been said that even during the depression years substantial numbers of mentally subnormal children were able, upon leaving school, to find jobs for themselves and live as self-supporting, socially competent members of society. . . In the post-war years during which full employment has come to be accepted as something more than a mere temporary phenomenon, the proportion of mentally subnormal persons who are socially competent has, of course, increased markedly." (Tizard, 1958, p. 447) Most of the studies just alluded to above were carried out on subjects in early maturity, not long after they had finished school and/or special training, or after they had been released from institutionalization.

A few studies published since the Tizard summary are also relevant to the present investigation. Phelps reported on the post-school adjustment of 163 subjects. He found, as did most earlier researchers, that despite restricted opportunities, mentally retarded persons generally made satisfactory adjustment after leaving school. He noted that attitudes and personal habits were major factors in vocational adjustment. (Phelps, 1956)

In a study of 208 male and 125 female educable mentally retarded subjects, Dinger also reported a generally hopeful picture of adjustment, with some 80 per cent employed (this is a figure that appears in several studies) and about 40 per cent having incomes over \$3,600. The social adjustment of the subjects, compared to their vocational success, was not as encouraging. (Dinger, 1961)

One of the more comprehensive studies is that of Kennedy, who examined the social adjustment of a group of mentally retarded adults in 1948 and again in 1960. Subjects were compared to normal controls in each case. She located 179 out of 256 subjects in 1948, and 102 in 1960. She found striking similarities between the retarded subjects and the control population:

1. The majority of persons in both the "subject" group and the control group made acceptable and similar personal, social, and economic adjustment.
2. In personal and familial behavior, subjects showed no striking divergencies from the normal controls.
3. Subjects were slightly less active in their degree of participation in social activities than controls, but the kinds of organizations they joined did not differ markedly.

Subjects did not make social menaces of themselves, but they did get in frequent minor trouble with the police, and had a higher rate of recidivism.

4. At the time of interview, similar proportions of both groups were employed and reported themselves as self-supporting. The weekly earnings of the two groups were quite favorable (subjects \$88.50, controls \$102.50). More than one-fourth

of both groups had been on the job for 12 years.

(Kennedy, 1962)

As noted earlier, most studies of the lives of the mentally retarded have been concerned with descriptions and have not delved into causes behind the varying levels of adjustment. In a study of retarded male youth in Texas, Peck attempted first to determine fundamental attributes or factors present in personal, socio-economic and vocational success; second, to validate a predictive test battery; and finally to evaluate the influence of rehabilitation training. His subject group consisted of males, 18 to 26 years of age, with I.Q.'s from 50 to 75. His principal findings were:

1. Seventeen "basic factors" involved in success were inferred from factor analytic treatment of his data. Major "syndromes" identified were:
 - a. "Effectiveness of the Employee": interrelated desirable job habits, making for effectiveness as an employee.
 - b. "Task Orientation (Withdrawal Syndrome)": successful work habits did not combine positively with leadership, friendship and outside activities.
 - c. "Escape from Responsibility": desirable leisure activities combined negatively with vocational success.
 - d. "Self-directed Responsibility": successful handling of credit and leisure combined with job habits of neatness and carefulness.
 - e. "Laborer Syndrome": job happiness with high number of hours worked per week combined with lack of leadership, permanency of residence and savings. Earnings were low and job tenure short.

f. **"Borderline Functioning"**: poor health and stamina, inability to handle company money, but with acceptable leisure activities.

g. **"Family Irresponsibility"**: few hours of work, low law conformity and need for aid from social agencies.

h. **"Failure Syndrome"**: loosely integrated personality.

2. Seventy-eight predictor variables were reduced to 21 by factor analysis. These were primarily from test scores. Hope was expressed that some test items might be useful for screening potential rehabilitation trainees.

3. Training was felt to be beneficial in creating better attitudes toward work; trained youths obtained a higher degree of success than those who entered employment without special work training.

4. Differences were found among the youths trained in different centers. (Peck, 1964)

Findings from the Baller, Charles, and Miller studies of earlier date will be presented in the "Results" section of the present report; they will be presented for purposes of comparison and analysis.

Evidence Regarding I.Q. Change

Few issues related to human intelligence have been debated more vigorously than the question of the degree to which an individual's general intelligence may be altered by associated factors. The question quite obviously has relevance to the present study.

The notion which has had much currency in the past that intelligence becomes fixed and immutable early in life has been considerably tempered by a number of longitudinal studies. A research involving some California school children revealed that less than 15 per cent stayed within ten I.Q.

points of their original score from early childhood to maturity, while more than a third of the group changed more than twenty I.Q. points.

(Honzik, Macfarlane and Allen, 1948) Such changes usually follow a pattern. Some children improve slowly and steadily; others show a slow and steady decline. Still others may have a V-shaped curve, or its opposite. (Sontag, Baker and Nelson, 1958) A follow-up of adults tested near 100 I.Q. in grade school produced I.Q.'s ranging from 90 to 132, and educational achievement from junior high school to graduate school, and occupations from unskilled labor to professional work.

(Charles and James, 1964)

The implications of the Sontag, Baker and Nelson report (1958) are especially important to the present review. The formal program of the research was initiated with the purpose of determining the relationship between I.Q. change and personality factors. Other variables of the children's life situations were included as the study progressed. The special pertinence and importance of the research by Sontag and his associates for the present study is indicated in the statement,

...One of our purposes in this monograph is to

present the data on I.Q. change among Fels children

in a more complete way than has been presented before.

The data on intelligence testing from Fels are unusually

complete for this type of longitudinal record. We

believe that our data on the extent and individual

patterns of I.Q. change may contribute to the body

of knowledge in the area of child development.

Our main interest, however, lies beyond the

psychometric implications of the data on I.Q. change.

For some time the director of the Institute has been interested in the relationship between I.Q. change and the personality structure of the child. He has watched the Fels children as they grew older and observed that shifts in relative mental ability over a period of years seemed to be associated with broader aspects of the children's individual patterns of adjustment in life. The development of personality patterns of adjustment in children with progressively increasing I.Q.'s appeared to be different from those of children with decreasing I.Q.'s (pp. 13-14)

The study just referred to involved children who, for the most part, were of normal or above normal intelligence; nevertheless, the following remarks are equally relevant and important for the study of the intellectual growth pattern of a below-average subject group.

It would appear that the theoretical construct of intelligence is somewhat artificial in nature, reflecting not only motivational aspects of content learning, but also reflecting another level of learning which has been termed "learning to learn." Some types of learning appear to be necessary to other types of learning in the acquisition of various types of skills and achievements. (p. 137)

Main Questions Re-Emphasized

Reviews of the kinds of studies mentioned make it apparent that there are many unanswered questions regarding mentally deficient persons. Almost all the existing studies are on young subjects. Something is

known of the influence of early experiences on human behavior. How do the mentally retarded fare as they reach the middle and the second half of life? Are any aspects of early experience particularly vital or critical in the lives of the retarded? While many retarded children seem to grow up to be responsible and self-sufficient adults, many others do not. What are the basic and pervasive differences in the experience of the successful and unsuccessful?

PROCEDURE OF THE STUDY

The first requirement of the study was to locate the subjects of the Baller studies (Baller 1936, 1939) and also persons of a comparison group. Then, their present social and intellectual status was to be determined. Finally, through interviews and examinations of the life records, antecedents of good and poor adjustment were to be inferred.

Subjects of the Study

Three different subject groups were included in the study. They were:

1. The members of the 1935 group. These were 206 individuals who had been in the "Opportunity Rooms" of the Lincoln, Nebraska, Public Schools until the end of their formal education. (See Appendix A.) They were all 21 years of age or older at the time of the original study, and all had rated below 70 I.Q. as measured by the Stanford-Binet Intelligence Scale (1916 Revision). (See Appendix B.) This sample will be called the "Low Group" in the present report.

2. The subjects of the 1937 study. These were originally 307 persons for whom social data were collected and reported. Of the 1937 group of 307 persons, 206 were randomly selected for the present study and matched with the principal subjects mentioned above and with the control subjects referred to in the next paragraph. The individuals of the 1937 study constitute the "Middle Group" of the present research.

3. A comparison group composed of persons of average abilities whose records were in the files of the Lincoln school system. These subjects were selected in 1935 by choosing the first case in the files

for whom specified characteristics matched those of the first case in group #1 above. Matching was carried out on age, sex, nationality background, and length of school-age residence in Lincoln, then by matching the second names, etc. The located and interviewed members of this group will be referred to as the "High Group."

Low Group

Age. Table 1 shows the age of Low Group subjects as of December 1, 1964. Both sexes were approximately 56 years of age.

Table 1.

AGE OF LOW GROUP SUBJECTS *

	No.	Mean Age in Years	Age Range in Years and Months	S.D. in Years
Male	61	56.15	51-8 to 61-3	2.62
Female	48	56.16	51-11 to 61-3	2.60
Total	109			

* Persons with known addresses. Individuals included are those for whom data are reported in other tables of this research. Ages computed to December 1, 1964.

Representativeness. One of the major problems of longitudinal studies is the representativeness of the group remaining in the follow-up study. This would apply except in the rare instances where all original subjects were found and involved. One way of judging the representativeness of available subjects is to compare the original total group and the current group on various characteristics. Such comparisons are presented in Tables 2 through 4.

Table 2

SEX RATIO OF CONTACTED LOW GROUP SUBJECTS

	<u>1935 Group</u>		<u>1951 Group</u>		<u>1964 Group</u>	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
Male	126	61	77	61	61	56
Female	80	39	50	39	48	44
Total	206	100	127	100	109	100

In Table 2 it is apparent that the sex ratio of located subjects remained approximately the same in 1935, 1951, and 1964. The mean of the original I.Q. scores varied little in the three study periods. (See Table 3)

Table 3

ORIGINAL INTELLIGENCE TEST SCORES FOR 1935 LOW GROUP,
1951 LOCATED SURVIVORS, AND 1964 LOCATED SURVIVORS

	<u>1935 Group</u>		<u>1951 Group</u>		<u>1964 Group</u>	
	<u>Male</u>	<u>Female</u>	<u>Male</u>	<u>Female</u>	<u>Male</u>	<u>Female</u>
Mean I.Q.	60.50	59.00	60.53	58.26	61.07	61.92
I.Q. Range	42-70	48-70	42-70	48-70	42-70	48-70
S.D.	7.78	8.25	8.58	8.06	7.58	3.91
N	126	80	77	50	61	48

Race and ethnic origin of subjects suggests that no marked selection took place in the follow-up studies (as presented in Table 4); the "Old American" segment had remained in the same proportion to other groups.

On the basis of available evidence, subjects of the present study seemed to be representative of the entire original population.

Table 4

RACE AND ETHNIC BACKGROUND OF 1935 LOW GROUP,
1951 LOCATED SURVIVORS, AND 1964 LOCATED SURVIVORS

	1935 Group		1951 Group		1964 Group	
	Male	Female	Male	Female	Male	Female
White, American born English Speaking	89	58	52	33	44	40
American born, Negro	4	3	4	1	3	2
German-Russian ^a	24	11	14	9	10	5
German ^a	4	4	4	4	3	1
Bohemian ^a	3	1	2	1	0	0
Jewish ^a	1	1	0	0	0	0
Italian ^a	1	2	1	2	1	0
Total of all subjects	126	80	77	50	61	48

^a Generally foreign-born parents, but parents spoke some English

Middle Group

Age. Present age was about 53 years for both sexes.

Representativeness. Comparisons of original to present located subjects is made in Tables 5 through 8. On the basis of 1935 I.Q. scores the present located subjects were almost identical with the original total population. The sex ratio remained identical. Ethnic distribution remained quite similar to the original also. From these data it would appear that the present group was not different in any important way from the original.

Table 5

AGE OF MIDDLE GROUP SUBJECTS

	No.	Mean Age in Years	Range	S.D. in Years
Males	78	52.91	48-11 to 59-11	2.61
Females	60	53.31	48-3 to 59-0	2.79
Total	138	53.09		2.74

Table 6

SEX RATIO OF CONTACTED MIDDLE GROUP SUBJECTS

	N	<u>1935 Group</u> %	N	<u>1964 Group</u> %
Male	118	56.45	78	56.52
Female	91	43.55	60	43.48
Total	209	100.00	138	100.00

Table 7

ORIGINAL INTELLIGENCE TEST SCORES FOR
1935 MIDDLE GROUP AND 1964 CONTACTED SURVIVORS

	<u>1935 Group</u>		<u>1964 Group</u>	
	Male	Female	Male	Female
Mean I.Q.	80.67	80.69	80.85	80.96
S.D.	3.17	4.66	4.93	4.30
I.Q. Range	74-88	72-88	74-88	72-88
N	102 ^a	86 ^b	68 ^c	57 ^d

^a No original I.Q. on 16 males^b No original I.Q. on 5 females.^c No original I.Q. on 10 contacted males^d No original I. Q. on 3 contacted females

Table 8

**RACE AND ETHNIC BACKGROUND OF
1935 MIDDLE GROUP AND 1964 CONTACTED SURVIVORS**

	<u>1935 Group</u>		<u>1964 Group</u>	
	Male	Female	Male	Female
White, American born, English speaking	100	76	64	47
American-born, Negro	0	0	0	0
German Russian ^a	3	1	3	1
German ^a	15	14	11	12
Bohemian ^a	0	0	0	0
Jewish ^a	0	0	0	0
Italian ^a	0	0	0	0
Total	118	91	78	60

^a Generally foreign-born parents, but the parents spoke some English.

High Group

Age. Average age was about 53 years for both sexes.

Representativeness. Comparisons of original to present located subjects is made in several tables beginning with Table 9. Of the interviewed, sex ratio was more nearly equal than in the original sample. Intelligence level, as determined by original tests, was almost identical between the original total population and the interviewed subjects. Ethnic distribution was different from the original, with a lack of "German-Russian" subjects. On the whole it would be safe to say that the present studied subjects are not unlike the original in most ways.

Table 9

**ORIGINAL INTELLIGENCE TEST SCORES FOR
1935 HIGH GROUP AND 1964 LOCATED SURVIVORS**

	<u>1935 Group</u>		<u>1964 Group</u>	
	Male	Female	Male	Female
Mean I.Q.	107.84	105.92	107.98	106.62
I.Q. Range	100-118	99-114	100-118	99-114
S.D.	4.92	4.82	3.05	2.58
N	126	80	54	52

Table 10

**RACE AND NATIONALITY BACKGROUND OF
1935 HIGH GROUP AND 1964 CONTACTED SUBJECTS**

	<u>1935 Group</u>		<u>1964 Group</u>	
	Male	Female	Male	Female
White, American born, English speaking	89	58	46	48
American born, Negro	4	3	0	0
German-Russian ^a	24	11	4	1
German ^a	4	4	3	2
Bohemian ^a	3	1	0	0
Jewish ^a	1	1	1	0
Italian ^a	1	2	0	1
Total of all subjects	126	80	54	52

^a Generally foreign born parents, but spoke some English

Data Collection

In a mobile society the locating of persons whose whereabouts have not been known for some years is a difficult task. The procedure followed was to check first for current addresses with the appropriate city and telephone directories. The Lincoln Social Service Exchange was able to provide the location of some subjects. An additional source of help was the Federal Social Security Administration. While strict privacy and the observance of the confidentiality of records is a prerequisite of any use of Social Security records, appropriate administrative decisions and recommended procedures made it possible to contact by letter some long-lost subjects. (See Appendix C.) The last known address, recorded on the data cards of the earlier studies, occasionally led to old neighbors or relatives who provided information. In other cases, however, even the neighborhood had disappeared, a casualty of urban change.

Located subjects were interviewed, usually in their homes, by a research assistant or one of the principal investigators. The interview followed a prescribed form which secured information about present status and about life history. Structured interviews were also conducted with spouses and with other close relatives whenever possible.

Subjects (and their spouses and children when available) were asked to take intelligence tests as a follow-up and extension of the small sample tested by Charles in the earlier study. (Charles, 1953) To provide incentive for the testing the subjects were offered monetary rewards for participation.

In addition to the interviews relevant information about the subjects was sought from various social agencies including the Lincoln Social Service Exchange, the Municipal Courts and the County Courts, and

several state bureaus of vital statistics. Where subjects were institutionalized, information was gathered from their records. The institutions included the Beatrice Nebraska State Home and the Lincoln State Hospital.

The interviewers, all advanced graduate students, were instructed in methods of approaching and interviewing subjects, in the use of questions, in the gaining of cooperation where testing was involved, and in recording social and interview data. Instructions were summarized in a "Procedures" manual. Data from all sources were recorded on cards designed for the purpose.

Variables Studied

Present Status

The research was planned to make maximum use of early data to provide evidence of direction and extent of change in lives of subjects and also to provide new insight in causes of this change. Most of the social variables were the same as those investigated in the earlier studies: (Baller 1936, Charles 1953, Miller 1961)

Location	Occupation and Employment
Mortality	Economic Status
Institutionalization	Law Conformity
Marital Status	Citizenship
Family Characteristics	Social Activities

Ability

Whenever possible, subjects were given intelligence tests. The test used for the two low groups was the Wechsler-Bellevue Adult Intelligence Scale. Members of the comparison group were administered the same test used in the 1937 study, namely the Terman Group Test of Mental Ability.

When it was not possible to test subjects an estimate of present level of intelligence was made from behavior data; e.g., if a man had been operating his own business successfully for some years, he would be judged at least "average" in functional ability.

Life Experiences

The "life-history blank" as it is usually called has been quite useful in identifying non-intellectual factors contributing to particular, specified behaviors. A life-history inventory was designed for the organization and structuring of data related to antecedents of present achievement and adjustment levels. An example of the use of a life-history blank in a context similar to this study may be seen in a longitudinal study of intelligence by Owens. (Owens, 1964)

Areas of life-experience covered were family background, occupational experience, personal influences, peer relations, health, current recreational activities, and educational background. A "long" form of 71 items and a "short" form of 31 items were developed and employed. (See Appendices D and E.) The long form was given to Middle Group subjects and the short form to the Low Group.

The original plan of having each subject fill out a complete life-history blank which could be intensively analyzed had to be altered. As already stated the low literacy level of some Low Group subjects and resistance to some items and to the length in general made necessary a shorter form adapted to interview use. All subjects interviewed in the three groups answered the same items. A sizeable additional group of items was completed by Middle and High Group subjects.

Responses to some items of the interview questionnaire will be described for each group; then inter-group comparisons will be made

for selected data.

Literate subjects were given a copy of the blank to complete during the interview. Non-literates were queried by the interviewer in a manner that made possible the covering of all items. The researchers recorded the responses immediately after the interviews.

Evaluation of Social and Ability Data

Social Status

Data on present status of all three subject groups was organized in tabular form. Then comparisons were made on status of the Low Group in 1936 and 1950. Present status of the Middle Group and High Group was compared to that of 1936. Finally, all groups were compared on selected variables to the general population.

Life-Experience Antecedents

The three groups were examined separately and contrasted or compared where useful insights might be found.

The Low Group, as a group, was known from previous studies to have done quite well, especially in view of predictions about the probable success of such persons. The data from the life-history blanks was first summarized to give a picture of the influences and experiences acting on these retarded and deficient subjects. Later, "most successful" and "least successful" subgroups were selected, using behavioral and social information as the basis for choice. Finally, the life-history records of these two extreme samples were contrasted in an attempt to find critical differences which would point toward causes, or at least correlates of good and poor adult adjustment.

Ability

Test scores for the subjects of the Low Group were cited for 1936, 1950, and for the current study. Test-retest scores for the Middle Group subjects tested in 1937 and again currently were reported. Some test-retest scores were also available for the comparison group (High Group). In each case, the statistical significance of differences was examined; the technique for the determination of the statistical significance of differences between means-correlated samples described by Wert, Neidt, and Ahmann was employed. (Wert, Neidt, and Ahmann, 1954)

As earlier indicated, for subjects of the Low Group who were not tested, estimates of ability were inferred from occupational, social, and general behavioral data. These broad ability estimates were cited in terms of per cent of each group in each category.

Impressions Via Word Portraits

Because much of the "flavor" of individual development is lost in the summarization of group data, sixteen subjects from the Low Group were selected for the presenting of "thumbnail" biographies. The hope is that such word portraits will reveal in a general way the patterns of dominant factors that have shaped the lives of the subjects of lower mental level. Even more specifically the hope is that such portraits will reflect some of the conditions that attach to relatively successful coping with life's situations as contrasted with records of considerable failure.

Interpretation of Tables

In the tables of the report some inconsistencies in numbers of cases appear. This circumstance is to be explained by the varying

amounts of information available for different subjects. For example, some subjects have been continuously institutionalized for most of their life and nothing additional really can be said of them. Maximum data presentation has been chosen at the expense of consistency of numbers from one table to another.

TABLE 1

TABLE 1

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Chapter 3

LIFE ADJUSTMENT

The degree of success experienced by the retarded in getting along in society is a matter of major importance. Results of the study of the social adjustment of the subjects in the three mental ability groups will be presented in this chapter.

The Low GroupLocation

Table 11 summarizes information on present location of subjects of the Low Group. Approximately 75 per cent of the original (1935) subjects were accounted for. Information available for the "accounted for" category ranges from knowledge of location only to extensive interview and test data.

Table 11
PRESENT LOCATION OF LOW GROUP SUBJECTS

	Males		Females		Both	
	N	%	N	%	N	%
Total number in original study	126	100.00	80	100.00	206	100.00
Total accounted for in present study	93	73.81	62	77.50	155	75.24
Locations*						
Deceased	32	34.41	14	22.58	46	29.68
Institutions (no penal institution involved)	2	2.15	6	9.68	8	5.16
City of Lincoln	40	43.01	23	37.10	63	40.65
Nebraska, outside of Lincoln	5	5.38	7	11.29	12	7.74
Other states	14	15.05	12	19.35	26	16.77

* All percentages based on number of subjects located

Three facts are noteworthy. First, the death rate was very high; approximately one-third are deceased. Second, institutionalization was low for a population sample having such a low original level of mentality. Third, a high percentage of subjects remained--or had returned--to the region where they grew up. Clearly, subjects in the local region were more likely to be contacted than those living in distant places.

Institutionalization

Fewer than 7 per cent of the low ability subjects were in institutions; none was in a penal institution.

Mortality

The Low Group, as noted in previous reports on these subjects, had a high death rate. It was observed earlier that these subjects suffered from an unusually high accidental death rate--30 per cent, in comparison to the 6 per cent expected. (Charles, 1953, p. 30) Table 12 presents the findings regarding the causes of death in the Low Group

Table 12

CAUSE OF DEATH: LOW GROUP

Cause	N	Male	N	Female	N	Both
		%		%		%
<u>Prior to and including 1951</u>						
Illness	9	52.94	8	88.89	17	65.38
Accident or Violence	8	47.06	1	11.11	9	34.62
Total	17	100.00	9	100.00	26	100.00
<u>Since 1951</u>						
Illness	15	93.75	4	100.00	19	95.00
Accident or Violence	1	6.25	0	0.00	1	5.00
Total	16	100.00	4	100.00	20	100.00

and provides a comparison between the data for the years prior to and after 1951. Illness rather than accident was the cause of death in 95 per cent of the cases; this percentage stands in rather significant contrast to the one reported for persons deceased prior to 1951 (approximately 65 per cent).

Marital Status

In Table 13 it may be seen that about half the subjects were married and living with the original spouse, and about 18 per cent never married. Death of spouse and divorce altered the marriages of the remaining subjects. More than 20 per cent had been divorced, some a number of times; of the divorced group, more than half had remarried.

Table 13

MARITAL STATUS OF LOW SUBJECTS

	Male		Female		Both	
	N	%	N	%	N	%
Married, living with spouse	36	54.54	21	39.62	57	47.89
Married, separated	1	1.52	0	0.00	1	.85
Spouse deceased, remarried	2	3.03	1	1.89	3	2.52
Spouse deceased, not remarried	1	1.52	4	7.55	5	4.20
Divorced, not remarried	5	7.57	8	15.09	13	10.92
Divorced, once remarried	8	12.12	8	15.09	16	13.45
Divorced, more than once, remarried	3	4.55	0	0.00	3	2.52
Never married	10	15.15	11	20.76	21	17.65
Total	66	100.00	53	100.00	119	100.00

Economic Status

Tables 14 through 17 show the employment and self-support records of the low population for the years 1951 (time of the Charles study) to 1962. Over 80 per cent of males and approximately 77 per cent of females were described as "usually employed." This employment was translated into complete self-support for 62 per cent of males and 69 per cent of females. Eighteen per cent of males and 12 per cent of females required relief assistance part of the time.

Table 14

EMPLOYMENT STATUS OF LOW SUBJECTS 1951-1962

	Male		Female		Both	
	N	%	N	%	N	%
No regular employment	12	19.67	11	22.92	23	21.10
Usually employed	49	80.33	37	77.08	86	78.90
Total	61	100.00	48	100.00	109	100.00

Table 15

ECONOMIC STATUS OF LOW SUBJECTS 1951-1964

	Male		Female		Both	
	N	%	N	%	N	%
Entirely self-supporting	38	62.30	33	68.76	71	65.14
Partially self-supporting	19	31.15	7	14.58	26	23.85
Totally dependent on relatives	1	1.64	4	8.33	5	4.59
Institutionalized	3	4.91	4	8.33	7	6.42
Total reported	61	100.00	48	100.00	109	100.00
Relief recipients	11	18.03	6	12.50	17	15.60

Employment was relatively stable, as may be seen in Table 14. Over half of both employed sex groups had held the same job through the entire period. However, there was a male contingent (18 per cent) who had held five or more jobs during the period. The 40 per cent of females with no employment listed included housewives.

Table 16

NUMBER OF JOBS HELD IN LAST FIVE YEARS BY LOW GROUP

Number of Jobs	Male		Female		Both	
	N	%	N	%	N	%
None	0	0.00	6	40.00	6	11.33
One	21	55.26	8	53.33	29	54.71
Two	4	10.53	0	0.00	4	7.55
Three	5	13.16	1	6.67	6	11.33
Four	1	2.63	0	0.00	1	1.88
More than five	7	18.42	0	0.00	7	13.20
Total responses	38	100.00	15	100.00	53	100.00
No response	1		10		11	
Information not available	2		1		3	
Total	41		26		67	

Nearly half the males were employed as unskilled workers and another third as semiskilled laborers. The remainder were involved in a variety of occupations including a few relatively high in the occupational hierarchy (e.g., business, laboratory assistant, selling). The females of the group, like the males, had the highest proportion of their number (over one-third) in unskilled work but the second highest (over one-quarter) in personal service, with semiskilled work in third place.

Table 17
TYPES OF WORK DONE FOR PAY BY LOW GROUP SUBJECTS

Type of Work	Male		Female		Both	
	N	%	N	%	N	%
Unskilled labor	38	48.10	12	35.29	50	44.26
Semiskilled labor	25	31.65	6	17.65	31	27.44
Clerical or office work	3	3.80	2	5.88	5	4.42
Sales clerk, door-to-door, etc.	0	0.00	1	2.94	1	.88
Personal service	2	2.53	9	26.47	11	9.74
Policeman, fireman	1	1.26	0	0.00	1	.88
Factory or shop foreman, farm manager, etc.	4	5.06	0	0.00	4	3.54
Auto or real estate selling	3	3.80	1	2.94	4	3.54
Semi-professional (Beautician, photographer, etc.)	0	0.00	2	5.88	2	1.77
Businessman, assuming risk and management duties	2	2.53	0	0.00	2	1.77
Research lab assistant	1	1.27	0	0.00	1	.88
None of the above	0	0.00	1	2.95	1	.88
Total	79	100.00	34	100.00	113	100.00

Conformity to Laws

Tables 18 and 19 present data on law conformity from 1951 to 1962.¹ The low subjects had a total of 56 traffic offenses and 12 civil infractions. As in the previous studies the civil offenses consisted primarily of drunkenness, plus a game law violation and a "foul language" charge. Four subjects accounted for all of the civil offenses and one individual alone accounted for 8 (67 per cent) of the civil offenses and 19 (34 per cent) of the traffic violations.

¹Tables 18, 19, 20, and 42 have been reproduced from the report of the Low Group subjects in the 1961 study of Miller (1965). These tables would be altered only slightly had additional information been secured for the years between 1961 and 1964 when the present research was completed. The tables mentioned are reproduced with the permission of the publisher of Genetic Psychology Monographs.

Table 18

LAW VIOLATIONS, LOW GROUP SUBJECTS 1951-1962

Violations	Male		Female		Both	
	N	%	N	%	N	%
Traffic	14	41.18	2	7.69	16	26.67
Civil	2	5.88	0	0.00	2	3.33
Both	2	5.88	0	0.00	2	3.33
None	16	47.06	24	92.31	40	66.67
Total	34	100.00	26	100.00	60	100.00

In Miller, p. 179, Table 27 (1965)

Table 19

NUMBER OF VIOLATIONS, LOW GROUP 1951-1962

Offense	Male	Female	Total
Traffic	47	9	56
Civil	12	0	12
Total	59	9	68

In Miller, p. 179, Table 28 (1965)

Citizenship and Social Participation

As may be seen in Table 20, nearly half the subjects reported not voting regularly. That this voting (if the self-report may be believed) was relatively uninformed was evidenced by the fact that many of the

subjects did not know the party--or even the name in some cases--of the governor of their state.

Table 20

CITIZENSHIP PARTICIPATION OF LOW GROUP SUBJECTS

	Male		Female		Both	
	N	%	N	%	N	%
Voted regularly	22	52.36	12	42.86	34	48.57
Did not vote regularly	20	47.64	16	57.14	36	51.43
Total	42	100.00	28	100.00	70	100.00

Adapted from Miller, p. 180, Table 29 (1965).

Social and recreational activities of the Low Group are reported in Table 21. Only two subjects--males--reported active participation in community clubs or organizations. Most of the subjects spent their spare time in solitary, home-or hobby-related activities.

Table 21

SOCIAL AND RECREATIONAL ACTIVITIES OF LOW GROUP

Type of Activity	Male		Female		Both	
	N	%	N	%	N	%
Club activity (Elks, Kiwanis fund raising, etc.)	2	6.90	0	0.00	2	4.08
Repairs around house	14	48.28	7	35.00	21	42.86
Hobbies	6	20.69	4	20.00	10	20.41
Outside job-connected activity	1	3.44	1	5.00	2	4.08
Miscellaneous	6	20.69	8	40.00	14	28.57
Total Responses	29	100.00	20	100.00	49	100.00
No response	0		2		2	
Information not available	12		4		16	
Total N	41		26		67	

More than half (52.76 per cent) of the subjects were members of a church. More females (64.29 per cent) than males (45.24 per cent) were members. Few of the subjects reported regular attendance or participation. It can be said that the church plays a very small role in life.

Table 22

LOW GROUP CLUB AND SOCIAL ORGANIZATION MEMBERSHIP

No. of Organizations	Male		Female		Both	
	N	%	N	%	N	%
0	18	66.67	11	52.39	29	60.42
1	8	29.63	7	33.33	15	31.25
2 - 3	1	3.70	2	9.52	3	6.25
4 - 6	0	0.00	1	4.76	1	2.08
Total responses	27	100.00	21	100.00	48	100.00

The membership (as contrasted with participation) in social organizations or clubs is indicated in Table 22. Many of the organizations in which membership was reported were only incidentally social in nature; they included women's "circles" in churches, fraternal insurance societies, occupational group affiliations and the like. While about 40 per cent of the group held membership in some kind of club or society, they cannot be said to have much involvement in social organizations.

The Middle GroupLocation

Table 23 summarizes information on present location of subjects of

the Middle Group. Approximately 72 per cent of the original 209 subjects (1935) were accounted for. As was true for the Low Group, information ranges from knowledge of location only to extensive interview and test data.

Table 23

PRESENT LOCATION OF MIDDLE GROUP SUBJECTS

	Male		Female		Both	
	N	%	N	%	N	%
Total number in original study	118	100.00	91	100.00	209	100.00
Total located for present study	90	76.27	62	68.13	152	72.73
Locations*						
Deceased	12	13.33	2	3.22	14	9.21
Institutions (no penal institutions involved)	0	0.00	1	1.61	1	.66
City of Lincoln	35	38.89	33	53.23	68	44.74
Nebraska, outside of Lincoln	8	8.89	8	12.91	16	10.53
Other states	35	38.89	18	29.03	53	34.86

* All percentages are based on number of subjects located

As many subjects had left the home community as had remained; most of the emigrants had moved to other states. Only one subject was institutionalized and a relatively low number were deceased.

Institutionalization

Only one subject was institutionalized; none was in a penal

institution.

Mortality

The Middle Group, as noted above, had not had a particularly high death rate with only about 9 per cent known to be deceased in the portion of the original population for whom data were available.

Cause of death could be learned for only four of the fourteen deceased subjects: accident and illness each took one male, childbirth and illness accounted for the two female deaths.

Marital Status

From Table 24 it may be seen that the great majority (83 per cent) of Middle Group subjects were married and living together. Seven per cent were divorced and 5 per cent and 12 per cent of males and females respectively were not married or had lost a spouse through death.

Table 24

MARITAL STATUS OF MIDDLE GROUP SUBJECTS

	Male		Female		Both	
	N	%	N	%	N	%
Married and living together	46	85.19	25	80.65	71	83.53
Living apart	1	1.85	0	0.00	1	1.18
Divorced	4	7.41	2	6.45	6	7.06
Not married or spouse deceased	3	5.55	4	12.90	7	8.23
Total responses	54	100.00	31	100.00	85	100.00
Information not available	24		29		53	
Total N	78		60		138	

Economic Status

Tables 25, 26, and 27 show the economic status of Middle Group subjects. From Table 25 it is apparent that the contacted subjects were a relatively secure group economically: over 90 per cent were entirely self-supporting. Of the remainder, 3.4 per cent required some help (eight subjects had some public relief assistance) and three were totally dependent on relatives or on an institution.

Table 25

ECONOMIC STATUS OF CONTACTED MIDDLE GROUP SUBJECTS

	Male		Female		Both	
	N	%	N	%	N	%
Entirely self-supporting	62	95.38	47	92.15	109	93.97
Partially self-supporting	3	4.62	1	1.96	4	3.45
Totally dependent on relatives	0	0.00	2	3.93	2	1.72
Institutionalized	0	0.00	1	1.96	1	.86
Total reported	65	100.00	51	100.00	116	100.00
Relief recipients	3		5		8	
Information not available	13		9		22	

Table 26 shows the distribution of jobs held by subjects of the Middle Group. Half the males were in the unskilled-semiskilled work group, with the rest fairly evenly distributed through a variety of occupations up to management and executive jobs. The distribution of jobs for females was somewhat similar to that of males, but with a greater emphasis on clerical and personal service work and less on business and administration.

Table 26

TYPES OF WORK DONE FOR PAY BY MIDDLE GROUP SUBJECTS

Type of Work	Male		Female		Both	
	N	%	N	%	N	%
Unskilled labor	58	29.29	23	28.75	81	29.14
Semiskilled labor	41	20.71	14	17.50	55	19.78
Clerical or office work	11	5.56	13	16.25	24	8.63
Sales clerk, door-to-door, etc.	17	8.59	8	10.00	25	8.99
Personal service	3	1.52	13	16.25	16	5.76
Policeman, fireman, etc.	6	3.03	0	0.00	6	2.15
Social worker	0	0.00	1	1.25	1	.36
Factory or shop foreman, farm manager, etc.	14	7.07	3	3.75	17	6.12
Surveying and drafting	3	1.52	0	0.00	3	1.08
Farm worker, farmer, farm manager	15	7.58	1	1.25	16	5.76
Auto or real estate selling	5	2.52	0	0.00	5	1.80
Reporter, advertiser, receptionist	1	.50	0	0.00	1	.36
Semi-professional (pharmacist, photographer)	5	2.52	1	1.25	6	2.15
Businessman assuming risk and management duties	13	6.56	0	0.00	13	4.68
Research worker	1	.50	0	0.00	1	.36
Executive (large business)	3	1.52	0	0.00	3	1.08
None of above	2	1.01	1	1.25	3	1.08
No response	0	0.00	2	2.50	2	.72
Information not available	0	0.00	0	0.00	0	0.00
Total	198	100.00	80	100.00	278	100.00

In Table 27 is shown a one-year employment record of some of this group. The figures for the males are more meaningful than for females (and consequently "Both") because some females (primarily housewives) reported not having worked for two years. The response was probably true but misleading since their not being gainfully employed did not make them public charges. More than 90 per cent of the males had worked at one job only during the period specified.

Table 27

NUMBER OF JOBS HELD IN PAST YEAR BY CONTACTED MIDDLE GROUP SUBJECTS

	Male		Female		Both	
	N	%	N	%	N	%
Held one job steadily	56	91.80	28	71.79	84	84.00
Changed jobs occasionally	1	1.64	2	5.13	3	3.00
Changed jobs frequently	2	3.28	2	5.13	4	4.00
Unemployed most of the time	1	1.64	2	5.13	3	3.00
Have not worked for two or more years	1	1.64	5	12.82	6	6.00
Total responses	61	100.00	39	100.00	100	100.00
No response	17		4		5	
Information not available	16		17		33	
Total N	78		60		138	

Law Conformity

Table 28 shows an approximately 30-year record of law conformity for 68 subjects who had remained in their home city. No information on law conformity was available for those subjects who had left the city.

Table 28

**LAW VIOLATIONS SINCE 1935 OF MIDDLE GROUP SUBJECTS
STILL RESIDING IN LINCOLN**

	Male		Female		Both	
	N	%	N	%	N	%
Civil	4	11.43	1	3.33	5	7.35
Civil and traffic	1	2.86	0	0.00	1	1.47
None	30	85.71	32	96.67	62	91.18
Total	35	100.00	33	100.00	68	100.00

Over 90 per cent of the subjects--96 per cent of the female--had no record of civil law violations. Traffic records per se were not available for this group. Most of the offenses of the six lawbreakers consisted of drunkenness or petty larceny. The one male charged with "Traffic and Civil" offense was arrested for drunk driving.

Social and Recreational Activities

Social and recreational activities are reported in Tables 29 and 30. While half the members belong to from one to seven organizations, 17 per cent report activity in those groups. Again, some of the organizations are only marginally social in nature. The remainder spent their spare time in home, hobby, and miscellaneous types of activity. The largest single category was "Repairs Around the House" for males.

Table 29

MIDDLE GROUP CLUB AND SOCIAL ORGANIZATION MEMBERSHIP

No. of Organizations	Male		Female		Both	
	N	%	N	%	N	%
0	23	47.97	13	50.00	36	48.65
1	12	25.00	4	15.38	16	21.62
2 - 3	8	16.67	8	30.77	16	21.62
4 - 6	3	6.25	1	3.85	4	5.41
7	2	4.16	0	0.00	2	2.70
Total responses	48	100.00	26	100.00	74	100.00

Table 30

SOCIAL AND RECREATIONAL ACTIVITIES OF MIDDLE GROUP

Type of Activity	Male		Female		Both	
	N	%	N	%	N	%
Club activity (Elks, Kiwanis fund raising, etc.)	8	16.67	5	17.86	13	17.11
Repairs around house	21	43.75	9	32.14	30	39.47
Hobbies	7	14.58	4	14.29	11	14.47
Outside job-connected activity	5	10.42	2	7.14	7	9.21
Miscellaneous	7	14.58	8	28.57	15	19.74
Total responses	48	100.00	28	100.00	76	100.00
No response	1		2		3	
Information not available	29		30		59	
Total N	78		60		138	

direct to school... (faint text)

The High GroupLocation

Table 31 summarizes information on the present location of subjects of the High Group. Approximately 60 per cent of the original group was accounted for, about a fourth more of the females than of the males. More than 40 per cent had left the state and another third were outside the city where they grew up but were still living in their native state.

Table 31

PRESENT LOCATION OF HIGH GROUP

	Male		Female		Both	
	N	%	N	%	N	%
Total number in original study	126	100.00	80	100.00	206	100.00
Total located for present study	64	50.78	56	76.00	120	58.25
Locations *						
Deceased	10	15.63	4	7.14	14	11.67
Institutionalized	0	0.00	0	0.00	0	0.00
City of Lincoln	24	37.50	18	32.14	42	35.00
Nebraska, outside of Lincoln	9	14.06	6	10.72	15	12.50
Other states	21	32.81	28	50.00	49	40.83

* All percentages based on number of subjects located

Institutionalization

None of the subjects was known to be institutionalized.

Mortality

The death rate for this group was not high with 15 per cent of the males and 7 per cent of the females known to be deceased. Cause of death

is shown in Table 32 for the 14 subjects known to be dead out of the total of 120 about whom information was available. Ten subjects--six of them males--had died of illness and four males had perished in accidents.

Table 32

CAUSE OF DEATH OF HIGH GROUP SUBJECTS

	Male		Female		Both	
	N	%	N	%	N	%
Illness	6	60.00	4	100.00	10	71.43
Accident or violence	4	40.00	0	0.00	4	28.57
Total	10	100.00	4	100.00	14	100.00

Marital Status

Approximately 90 per cent of the High Group subjects interviewed were married and living together with about 10 per cent unmarried or with spouse deceased. Eight of the "Married and living with spouse" group had been divorced but had remarried. Two other subjects had not remarried after divorce.

Table 33

MARITAL STATUS OF HIGH GROUP SUBJECTS

	Male		Female		Both	
	N	%	N	%	N	%
Married and living together	51	94.44	43	82.69	94	87.25
Divorced	0	0.00	2	3.85	2	2.12
Not married or spouse deceased	3	5.56	7	13.46	10	10.63
Total	54	100.00	52	100.00	106	100.00

Economic Status

Tables 34 through 36 show the employment and self-support record of the High Group for the years of 1951 to 1962. Of the total 106 subjects studied only one female was unemployed and "unemployable." Over 96 per cent were entirely self-supporting and the other 4 per cent partially self-supporting with some public assistance required.

More than 96 per cent had worked at the same job for more than three years so they could be described as a very stable group occupationally. While a wide variety of activities were reported, most were relatively high on the occupational scale as may be noted in Table 36.

Table 34

EMPLOYMENT STATUS OF HIGH GROUP SUBJECTS 1951 - 1962

	Male		Female		Both	
	N	%	N	%	N	%
No regular employment	0	0.00	1	1.90	1	0.90
Usually employed	54	100.00	51	98.10	105	99.10
Total	54	100.00	52	100.00	106	100.00

Table 35

ECONOMIC STATUS OF HIGH GROUP, 1951 - 1962

	Male		Female		Both	
	N	%	N	%	N	%
Entirely self-supporting	51	94.44	51	98.08	102	96.23
Partially self-supporting	3	5.56	1	1.92	4	3.77
Totally dependent on relatives	0	0.00	0	0.00	0	0.00
Total reported	54	100.00	52	100.00	106	100.00

Table 36

OCCUPATIONS OF HIGH GROUP SUBJECTS

Occupation	Male	Female	Occupation	Male	Female
Advertising business	2		Librarian		1
Architect	1		Lumber business	1	
Auto parts business	1		Mailer, newspaper	1	
Business executive	6		Manager of business	6	1
Civil engineer	1		Mechanical engineer	2	
Claims adjuster	1		Medical doctor	1	1
Clerical		3	Medical secretary		1
Custodian	1		Meter reader	1	
Dentist	2		Newspaper man	1	
Drapery business		1	Parole officer	1	
Editor	1		Postal employee	2	
Farmer	1		Publisher		1
Federal Civil Service	1		Real estate agent	1	
Floor covering business	1		Refrigeration business	1	
Geologist	1		Research chemist	1	
Housewife		32	Research worker	1	1
Industrial analyst	1		Salesman	6	
Industrial worker	1		Secretary		1
Insurance adjustor	1		Statistician	1	
Insurance agent	1		Supply company	1	
Insurance claims supt.		1	Teacher		5
Insurance underwriter	1		Telephone operator		1
Laborer	1		Waitress		1
			Unemployable	54	51
				54	52

Law Conformity

The court records of the High Group subjects are reported in Table

37. Less than half of the total group had traffic violations; none had a civil offense on record.

Table 37

LAW VIOLATIONS OF HIGH GROUP 1951-1962

Violations	Male		Female		Both	
	N	%	N	%	N	%
Traffic	16	66.67	3	16.67	19	45.24
Civil	0	0.00	0	0.00	0	0.00
Both	0	0.00	0	0.00	0	0.00
None	8	33.33	15	83.33	23	54.76
Total	24	100.00	18	100.00	42	100.00

Social and Recreational Activities

These are reported in Tables 38 and 39. About three-fourths of the High Group subjects belonged to one or more social organizations. A third of the subjects--slightly more females than males--were active in community organizations and clubs. Half the males but no females reported working at house repairs. Not a single male or female subject reported any hobby activity in the five years preceding the study.

Table 38

HIGH GROUP CLUB AND SOCIAL ORGANIZATIONS MEMBERSHIP

No. of Organizations	Male		Female		Both	
	N	%	N	%	N	%
0	3	18.75	3	30.00	6	23.08
1	2	12.50	2	20.00	4	15.38
2 - 3	6	37.50	2	20.00	8	30.77
4 - 6	2	12.50	1	10.00	3	11.54
7 or more	3	18.75	2	20.00	5	19.23
Total responses	16	100.00	10	100.00	26	100.00

Table 39

SOCIAL AND RECREATIONAL ACTIVITIES OF HIGH GROUP

Type of Activity	Male		Female		Both	
	N	%	N	%	N	%
Club activity (Els, Kiwanis fund raising, etc.)	5	31.25	3	37.50	8	33.33
Repairs around house	8	50.00	0	0.00	8	33.33
Hobbies	0	0.00	0	0.00	0	0.00
Outside job-connected activity	1	6.25	0	0.00	1	4.17
Miscellaneous	2	12.50	5	62.50	7	29.17
Total responses	16	100.00	8	100.00	24	100.00
No response	2		3		5	
Information not available	0		0		0	
Total N	18		11		29	

Discussion of Social Data for the Three Groups

Comparing the performance of the three groups on social adjustment is revealing. Some expected differences appear; less difference between groups than the uninitiated might anticipate appears also in some aspects of behavior. In some contexts census or general population data are cited; the advantages of such comparisons seem obvious, especially since the High Group (Baller's original Control Group) cannot really be taken as representative of the total population.

Location

An American characteristic especially since World War II is that of mobility. The Low Group subjects were much more likely to stay "close to home" than either Middle or High Group subjects. More than 65 per cent of the Low Group subjects remained (or had returned to) the home town, while less than 45 per cent of the Middle and High Groups were in Lincoln. One way of reducing adjustment problems is to reduce the incidence of new situations requiring adjustment; some of the success of Low Group subjects may have resulted in part from just this avoidance of the new.

Institutionalization

While more of the Low Group was institutionalized than the Middle Group, both totals serve to refute the idea that below-average persons are institutionalized in great numbers. The total from the two groups, 9 out of 205, is not large and consists generally of persons who had been institutionalized continuously since early life. Most of these persons had severe physical handicaps as well as limited ability.

Mortality

Data on the subjects of this study go back to about age 5. In the half century under consideration life expectancy has changed remarkably, especially for children and youth. Therefore, life tables from only one period are somewhat misleading. Combining data from three census periods (1910, 1940, and 1962) the totals in Table 40 were developed. In the general population approximately 19 per cent of males, 13 per cent of females, or 16 per cent of the total age group under consideration would have died between the ages of 5 to 56 during the period of 1910 to the mid-1960's. (Glover, 1921, Greville, 1946, Vital Statistics of the United States, 1964)

Table 40

**APPROXIMATE TOTAL DEATHS PER 100,000 POPULATION
FOR THREE AGE PERIODS**

Age Group	Males	Females	Total
5 - 12 (1910 census ^a)	1,854	1,737	1,796
12 - 32 (1940 census ^b)	4,247	3,403	3,824
32 - 56 (1962 census ^c)	13,835	8,201	10,884
Total	19,636	13,341	16,504

^aGlover, 1921

^bGreville, 1946

^cVital Statistics of the United States, 1964

While the figures in the paragraph above are only approximations, it is clear that death rate in the Low Group is very high. The rate of 35 per cent of the males, 28 per cent of the females, and 33 per cent of the total "Low Group" is very high. The rate of death in the Low Group is very high.

and group of subjects who are involved in the study

the total number of subjects deceased is about double that of "average." This high death rate in a population of low ability is consistent with other studies and reports. (Charles, 1953, p. 29)

As noted earlier, in Table 11, accidental death rate for the years since 1951 has been much lower than for the earlier periods for these low ability subjects. A number of explanations suggest themselves; perhaps the least apt eliminated themselves early, perhaps with increasing age less hazardous work was undertaken, perhaps they have simply learned to be more prudent. Decreasing accidental death rate with increasing age is a phenomenon noted in industrial safety studies.

In contrast to the Low Group, the Middle Group with 13 per cent death rate for males, 3 per cent for females, and 9 per cent total shows a considerably lower rate than the average for the population in general (especially for females). There are no comparable data in the literature for dull groups so it is probably not unreasonable to infer that the difference between the Middle Group and data for persons in general is due to chance--a function of sample. Similar figures appear for the High Group.

Marital Status

Comparing marriage figures for the three groups, it is apparent that the Low subjects were less fortunate in terms of marriage stability than the Middle and High Groups. The latter two groups appear to be very much alike in this aspect of adjustment.

The Low subjects were somewhat more likely to be living alone, either because of never having married or through loss of spouse in death or divorce. The "Married and living with spouse" figures do not reveal previous marital history; some subjects in each group have

divorced and remarried, some several times. The only thing that is clear is that the Low subject had less success in getting, holding, or replacing a mate.

In examining the marital status of the Low subjects it may be noted that over the 30 years or so during which the group has been studied, there has been a lack of continuity in names of spouse for some subjects. Legal divorces were reported in Table 13, but there is reason to believe that desertion--"the poor man's divorce"--has occurred and that some of the "marriages" never had the sanction of law or clergy and thus were easily dissolved.

Table 41 presents marriage data from the United States Census at the time of this study. It should be noted that the United States data are not controlled for age, making exact comparisons impossible. It is apparent that the per cent of Middle and High Group subjects in this married and living with spouse was as good as or better than expectation but not in the Low Groups. However, the divorce rate in Low and Middle Groups was much higher--two to ten times--than that of the national average. The highest divorce rate, like the lowest marriage rate, was in the low female group.

Table 41
UNITED STATES MARRIAGE DATA: PERCENTAGE COMPARISON *
MARCH 1963

	Single %	Married %	Widowed %	Divorced %
Male	24.0	71.0	2.9	2.1
Female	18.2	68.3	10.6	2.9

* Goldfield, E. D. (ed.) Statistical Abstracts of the United States, 1964, p. 31.

Economic Status

In 1935 Baller found 27 per cent of the Low Group to be self-supporting with another 57 per cent partially self-supporting (Baller, 1936). One of the happiest aspects of the adjustment of this segment of the population is apparent from Table 42. The totally self-supporting persons had increased to 36 per cent in 1951 and to 67 per cent at the time of this study. Relief need had decreased to 16 per cent of the group. Comment was made earlier on the high per cent of this group fairly regularly employed and on the relative stability of job-holding.

Table 42

ECONOMIC STATUS OF LOW GROUP SUBJECTS: PERCENTAGE COMPARISON * 1951 - 1962

	Males		Females		Total	
	1951	1962	1951	1962	1951	1962
Entirely self-supporting	32.62	65.52	41.93	70.71	36.25	67.62
Totally dependent on relatives	4.08	1.72	16.12	6.38	8.75	3.81
Relief recipients	55.13	18.97	25.83	12.77	43.75	16.19
Institutionalized	8.16	5.17	16.12	8.51	11.25	6.67

* 1951 data from Charles, 1953, p. 44.

1962 data from Miller, 1965, Table 25, p. 178.

It is indeed a cause for satisfaction that there has been steady improvement in this vital area of adjustment. Satisfaction must not, however, obscure the realization that this group still remained more of a drain on public resources than a "normal" group. For the United States as a whole in 1962 the rate of unemployment in the civilian labor force was 5.3 for males, 6.2 for females, and 5.6 for the total labor

group--much lower figures than the ones for this group. (Goldfield, 1964, p. 216)

A note of caution would seem to be appropriate in connection with the relatively satisfactory economic and social adjustment of the Low Group subjects. The question may quite properly be raised whether the comparatively high death rate of these persons as elsewhere recorded may not have exercised a selective influence on the group as a whole, resulting in a "survival of the fittest." The question is all the more relevant in view of the fact that the death rate at the time the Low Group subjects were in their younger years was relatively high not only in comparison with persons of better intelligence but in comparison with the Low Group subjects at later periods of time.

An examination of the records of adjustment of Low Group subjects prior to their death discloses some rather useful information. At the time of the latest follow-up study approximately 48 per cent of the individuals who were deceased had had a record of satisfactory economic adjustment and good employment status. This percentage is even higher than the one reported in Table 42 under the heading "Entirely self-supporting." Stated somewhat differently there are reasons to believe that at least as many of those now deceased would be self-supporting at the present time had they not fallen victim to unusual occurrences such as fatal automobile accidents (four persons), war casualties (two persons), and death by natural causes (e.g., pneumonia, appendicitis, heart attack).

The evidence does not support the hypotheses that death tended to select from the total group the individuals who had established themselves as poorly adjusted individuals and destined to continue in that manner.

Middle and High Groups were very much alike in some aspects of

economic status, with 93 per cent and 95 per cent entirely self-supporting and with considerable stability and regularity of employment compared to the Low Group. In kinds of occupations however, Low and Middle groups bore strong resemblance to each other (although with a much higher percentage of unskilled labor in the Low Group) with the High Group generally in more prestigious and profitable occupations. Only one laborer was identified in the High Group, for example, while 50 per cent were in this category in the Middle Group and 70 per cent in the Low Group.

Law Conformity

All three groups proved to be generally law abiding, at least as far as the Lincoln records gave evidence. Conviction for civil offenses ranged from none for High Group subjects to about 9 per cent (six individuals) for the Middle Group with the Low Group at 7 per cent. Evidence on traffic offenses was not available for the Middle Group, but the High Group had nearly double the proportion (45 per cent) of the Low Group (26 per cent).

It is quite apparent that the mentally deficient and "dull" subjects as they were called earlier, although including some occasional troublemakers, had not posed much of a threat to the peace of their community. As noted in an earlier study, their offenses reflected lower class status as much or more than low intelligence per se.

Social and Recreational Activities

It is generally reported that participation in the social life of a community is positively related to intelligence. Such proved to be

the case with the three groups studied here. A record of no membership in organizations occurred in a stairstep fashion: 23 per cent for the High Group, 48 per cent for the Middle Group, and 60 per cent for the Low Group. Participation in membership however occurred in the order: Low Group, 4 per cent; Middle Group, 17 per cent; High Group, 33 per cent. In short, the duller the individual the less likely he was to belong to or participate in a social organization.

On the other hand it is worth noting that of the lowest group, 40 per cent belonged to organizations and a few spent some time in club activity. As mentioned in an earlier discussion, social class is a powerful factor without regard to intelligence, though of course the two are related.

On the other hand it is worth noting that of the lowest group, 40 per cent belonged to organizations and a few spent some time in club activity. As mentioned in an earlier discussion, social class is a powerful factor without regard to intelligence, though of course the two are related.

Chapter 4

ABILITY AND PERFORMANCE OF THE THREE GROUPS

The question of the stability of intelligence and general competence was discussed in the review of literature. Special attention was directed to the relationship between change and alterations in personality development. Significant changes have been observed in the subjects of this study and will be reported in this chapter. These observed changes will later be considered in the context of the lives of the subjects.

Low Group

The Low Group originally averaged 60.50 I.Q. for males and 59.00 I.Q. for females. One of the surprises of the 1951 study was the finding of a mean Wechsler-Bellevue score of over 80 I.Q. on a sample of the Low Group. On evaluation of both test scores and performance in society, the subjects of the study were described as falling into these categories: about 20 per cent continuing to be clearly deficient, about 10 per cent testing low but managing to get along in society, about 65 per cent giving evidence of being dull-normal or average, and about 5 per cent having physical handicaps rendering evaluation of ability doubtful. (Charles, 1951, pp. 66-67)

Some of the same subjects tested by Charles in 1950 were retested in the present study. Of the original group retested in the 1950 study, three had died, four had moved out of the state, and two refused testing in 1962. The results of the retesting are shown in Table 43. Increases of a few points were found in Verbal, Performance, and Full-

Table 43

LOW GROUP TEST SCORES 1950-1961

	Wechsler-Bellevue					
	Full Scale ^a		Performance Scale ^b		Verbal ^c	
	1950	1961	1950	1961	1950	1961
E.B.	75	75	81	78	73	72
H.B.*	60	67	72	76	56	63
E.D.	80	92	87	96	76	87
A.D.*	68	67	71	68	69	72
W.F.	80	95	77	89	83	97
C.G.	87	89	93	89	82	88
M.G.	90	90	103	93	79	85
H.G.	84	85	87	84	82	86
V.H.	57	59	62	63	62	63
B.I.	69	75	77	81	60	73
R.J.	80	84	91	98	73	72
E.M.	76	90	89	103	68	76
L.M.	93	100	100	106	87	92
E.R.	75	95	82	97	74	92
C.V.*	56	61	50	63	56	66
Mean I.Q.	75.33	81.60	81.53	85.60	72.00	78.93
S.D.	11.09	12.83	13.47	13.40	9.65	10.85
Mean I.Q. for Institutionalized Subjects	61.33	65.00	64.33	69.00	60.33	67.00
S.D.	4.99	2.83	10.14	5.35	10.61	6.48
Mean I.Q. for Non-Institutionalized Subjects	78.83	85.75	85.83	89.75	74.92	81.92
S.D.	9.28	10.84	10.42	11.45	8.04	9.95

* Institutionalized subjects (t value computations include these three persons)

^a Full Scale: $t = 4.07$, significant at less than .01 level

^b Performance: $t = 2.10$, significant at less than .10 level but not at .05

^c Verbal: $t = 6.02$, significant at less than .001 level

Full Scale $r = .879$ Performance $r = .842$ Verbal $r = .528$

t values for non-institutionalized - two tailed

Full Scale: $t = 3.78$, significant at less than .01 level

Performance: $t = 1.75$, not significant

Verbal: $t = 5.13$, significant at less than .001 level

t values for institutionalized - two tailed

Full Scale: $t = 1.58$, not significant

Performance: $t = .77$, not significant

Verbal: $t = 3.30$, significant at less than .10 but not at .05 level

Scale Wechsler-Bellevue I.Q.'s. Scores are reported in Table 44 only for those persons who were tested both times.

Table 44

ESTIMATED ABILITY OF LOW GROUP SUBJECTS						
Category	Male		Female		Both	
	N	%	N	%	N	%
1. Permanently retarded	5	15.62	2	11.11	7	14.00
2. Low test score, but "getting along" in society	5	15.62	2	11.11	7	14.00
3. Borderline	12	37.50	11	61.11	23	46.00
4. Average or better	9	28.14	3	16.67	12	24.00
5. "Victim of circumstances"	1	3.12	0	0.00	1	2.00
Total	32	100.00	18	100.00	50	100.00

Tests of statistical significance of differences were conducted on the I.Q. ratings which appear in the several columns of Table 43. The tests of significance are reported in some detail in a monograph by Miller (1965). For the verbal and full-scale intelligence quotients, there were gains that were statistically significant; the changes in scores on the performance scale were not statistically significant. Coefficients of correlation were computed for each of the three paired columns of scores. This was done in order to determine whether the changes in I.Q. scores as shown in Table 43 were statistically significant not only for the subjects as a group but also for subjects as individuals. The additional information (the coefficients of correlation) largely confirms the conclusion that the changes are indeed

significant. Scores for institutionalized subjects were examined separately and for the several categories of the tests the gains in scores were nonsignificant.

Between the two test periods (1950 vs. 1961) the Wechsler-Bellevue Test was restandardized (WAIS); the same weighted scores could therefore result in different I.Q.'s from one test period to the other. To determine whether the I.Q. gain was a demonstration of better functioning or only a more advantageous relative standing in relation to Wechsler's standardization group, 1950 and 1962 weighted scores were compared. Examined in this fashion no significant differences were found. Therefore, it seems safe to say that the higher 1962 scores show only a better relative standing with respect to age standardization groups rather than an increase in actual function level on the tests.

Of greater importance than any test score is the social functioning of a mentally deficient person. On the basis of recorded data and personal acquaintance with the subjects and their lives, fifty Low Group subjects were sorted into five "Clinical-Social" categories:

Category 1. Permanently retarded. Most of these subjects were institutionalized or family-dependent.

Category 2. Low test score (generally in the 60's but "getting along" in society. These subjects were able to hold jobs, carry on family life in some cases, stay out of trouble and in general survive with little or no help despite poor abilities.

Category 3. Below average. "Borderline" or -1 in American Association of Mental Deficiency ratings. (See Table 45.)

Category 4. Average or better. This group was in every way

indistinguishable from the general population. Their social adjustment and behavior, while often suggesting lower-class orientation, was socially and economically "average."

Category 5. "Victims of circumstances." The one male in this category suffered from multiple handicaps and should not have been identified as primarily mentally deficient.

These classifications were made by the authors on the basis of subjects' economic self-sufficiency and employment record, occupation, home and family life, status and activity in community, and general life pattern since childhood. Classifications of 50 subjects are shown in Table 45.

Table 45

LEVELS OF IMPAIRMENT IN MEASURED INTELLIGENCE UNDER THE
AMERICAN ASSOCIATION ON MENTAL DEFICIENCY CLASSIFICATION

Levels of Impairment	Impairment in Degree of Measured Intelligence	Standard Deviation Ranges	I.Q. Scores for Tests with S.D. of 15
-1	Borderline	-1.01 - -2.00	70 - 84
-2	Mild	-2.01 - -3.00	55 - 69
-3	Moderate	-3.01 - -4.00	40 - 54
-4	Severe	-4.01 - -5.00	25 - 39
-5	Profound	Below -5.00	Below 25

Heber, R. F. Modification in the manual on terminology and classification in mental retardation. Amer. J. Ment. Defic., 1961, 65, 499-500.

A manual on terminology and classification in mental retardation. Amer. J. Ment. Defic., 2nd ed., 1961, 1-109.

Nearly half were placed in Category 3; they were clearly below average in ability but in general were useful and productive citizens. About a fourth were classed in Category 4; their homes, jobs, family lives, community adjustment, and the like showed them to be typical citizens of the community, generally lower-class but with some in middle class by any criterion of social functioning. The remainder were evenly divided into the two lower groups, plus one multiple handicapped male in Category 5. Sex differences were marked by a strong tendency (61 per cent) for females to fall into Category 3 rather than into any of the other groups; males were more likely to be higher or lower than females.

In short, the Low Group had maintained or exceeded in 1962 the improved levels achieved between the 1935 and 1950 studies. At the time of the current research at least a fourth of the subjects could not be described as mentally deficient in any way and nearly half were below average or mildly deficient but not seriously or severely retarded. To what could this improved status be attributed?

One possibility is mistaken original diagnosis or inadequate testing. Sixteen of this group (8 males and 8 females) lived in families where English was not the native tongue (for most a German-Russian patois was the language heard at home) or where social circumstances conspired against good intelligence and school performance. However, it must be remembered that test score below 70 was only one of three criteria for placement in this Low Group in 1935: academic failure in the early grades and consequent placement in an "opportunity room" were non-test criteria for inclusion.

The tendency to regression toward the mean might also be considered

as an explanation of some of the improvement. Another possibility is that of slow intellectual growth continuing much longer than we are accustomed to expect. It should be remembered that not all the Low subjects reached an acceptable level. A minority who were low in ability and performance early have remained quite inadequate by any criterion.

Much the same question arises in the present context that was noted in connection with the economic adjustment of the low ability group; namely the question whether death may have been a selectively influencing factor. Does the evidence indicate that deceased members of the Low Group were disproportionately of the lower mental ability segment of the total Low Group? Data relevant to the question are found in Table 3 which shows that the 1951 and 1964 samples do not differ significantly from the original 1935 sample where initial measurements of intelligence are concerned.

The generalization that environmental stimulation is effective only in very early years in improving ability needs further investigation. After an unimpressive start--low I.Q., academic failure, and poor adolescent and early adult records--many of the subjects of this study have become indistinguishable from the general population of their communities; only the old records of the researchers and the schools continue to tell a story of deficiency. Their adult lives tell no such story.

Middle Group

The Middle Group subjects had originally been tested with the Terman Group Test of Mental Ability, the Otis Group Intelligence Test, or the National Intelligence Test. A small group of located survivors

was retested for the current study with the Terman instrument. The results of that retesting are shown in Table 46.

Table 46

MIDDLE GROUP INTELLIGENCE TEST - RETEST

Initials	Original* Test	I.Q.	Current Test	Retest I.Q.
W.B.	NAT	79	Terman	81
C.Y.	Terman	84	Terman	88
P.S.	NAT	80	Terman	94
R.H.	Terman	87	Terman	84
H.F.	Terman	78	Terman	104
N.E.	Terman	73	Terman	85
R.B.	Terman	85	Terman	83
E.A.	Terman	79	Terman	83
E.C.	Terman	82	Terman	110
F.H.	Terman	82	Terman	72
M.H.	Terman	82	Terman	87
V.B.	Terman	83	Terman	77
L.A.	NAT	74	Terman	78
C.D.	Terman	83	Terman	91
L.B.	Terman	85	Terman	98
A.B.	Terman	81	Terman	97
M.A.	NAT	81	Terman	93
V.D.	Terman	76	Terman	93
Mean		80.77	Mean	88.78
S.D.		3.67	S.D.	9.15

$t = 4.10$, significant at .001 level (two tailed)

$r = .06$

Some rise in mean score for the group of subjects was found for the sample retested; several individuals moved up into the "average" range and one person went from 82 I.Q. to 110 I.Q. The t test of significance of difference between the original scores and the retest scores shows a difference that is statistically significant. Calculation of a coefficient of correlation between the scores for individuals respectively alters the evidence of test-retest score improvements. There was a

significant gain from one mean to the other but the direction of change for individuals shown in the low correlation ($r = .06$) dissipates the idea of gain on an individual by individual basis.

Since group tests were used for both the childhood test and the current examination, confidence in the scores cannot be as great as in the case of the Low Group. Results of the testing, however, seem consistent with the life histories of the subjects and with their earlier performance. A reasonable conclusion about how the Middle Group fared intellectually (if we may make a very cautious estimate on the basis of so small a sample) is that these subjects, called "dull" in the 1930's (Baller, 1939), had not regressed into any lower state in thirty years.

High Group

The "High Group" of the current study was originally seen (Baller, 1930) as an average or control group. The sample retested for the current study supports the "averageness" of the group. Despite forty years between tests (original testing was done between 1922 and 1929) the mean I.Q. was 107 on both occasions. (See Table 47) Group tests were used for both examinations. The treatment of the data in Table 47 indicates that the change from test to test was not significant (statistically significant). There is however another kind of evidence to take into account. It is that although the test scores fall within the average range, the occupational status of these persons points to a higher level of mental ability. A sizeable percentage of the contacted individuals, inclusive of those whose scores are shown in Table 47, are engaged in occupations that require education and competence beyond that generally associated with average intelligence.

Table 47

HIGH GROUP INTELLIGENCE TEST - RETEST

Initial	Original* Test	I.Q.	Current Test	Retest I.Q.
M.A.	Terman	114	Terman	110
H.A.	Terman	108	Terman	111
D.A.	Terman	111	Terman	106
L.B.	Terman	103	Terman	106
W.B.	Terman	111	Terman	108
R.B.	Terman	109	Terman	111
E.B.	Terman	103	Terman	111
S.B.	Terman	107	Terman	100
C.C.	Terman	110	Terman	105
J.C.	Terman	105	Terman	102
W.D.	Terman	110	Terman	110
M.F.	Terman	100	Terman	104
M.G.	Terman	105	Terman	106
W.H.	Terman	104	Terman	112
J.H.	Terman	113	Terman	118
D.M.	Terman	117	Terman	108
F.R.	Terman	106	Terman	112
B.B.	NAT	102	Terman	99

*Original tests for this group were administered between 1922 and 1929 when the subjects were in elementary school.

Mean	107.67	Mean	107.62
S.D.	4.45	S.D.	4.62

$t = .044$, not significant

$r = .39$

Chapter 5

SUMMARY OF LIFE-HISTORY DATA

TABLE 1

The original plan of having each subject fill out a complete life-history blank which could be intensively analyzed had to be altered. As already stated the low literacy level of some Low Group subjects and resistance to some items and to the length in general made necessary a shorter form adapted to interview use. All subjects interviewed in the three groups answered the same items. A sizeable additional group of items was completed by Middle and High Group subjects.

Low Group

Tables 48 to 55 summarize responses to items concerning early influences on the subjects. Advice and instruction were obviously in short supply, especially for males. Over 30 per cent reported that no one gave them advice on grooming; 40 per cent reported seeking no help or advice of any kind. Females also showed neglect but not as much as the males. Forty per cent of the subjects only occasionally or never attended a Sunday School.

Table 48

PERSONS RESPONSIBLE FOR THE SUBJECTS' KNOWLEDGE
OF HEALTH AND APPEARANCE LOW GROUP

Person	Male		Female		Both	
	N	%	N	%	N	%
Mother	8	25.00	8	50.00	16	33.33
Father	1	3.13	1	6.25	2	4.17
Both parents	6	18.75	5	31.25	11	22.92
Older brothers and sisters	0	0.00	1	6.25	1	2.08
School teachers	1	3.13	0	0.00	1	2.08
Someone in institution where lived	2	6.25	0	0.00	2	4.17
Military	4	12.50	0	0.00	4	8.33
Some other adult	0	0.00	0	0.00	0	0.00
No one	10	31.25	1	6.25	11	22.92
Total responses	32	100.00	16	100.00	48	100.00
No response	1		10		11	
Information not available	8		10		18	
Total N	41		26		67	

Table 49 PERSONS TO WHOM LOW GROUP SUBJECTS WENT FOR ADVICE
WHEN SIXTEEN YEARS OLD

Person	Male		Female		Both	
	N	%	N	%	N	%
Friends own age	0	0.00	0	0.00	0	0.00
Mother	4	13.33	7	33.33	11	21.57
Father	5	16.67	3	14.29	8	15.69
Both parents	6	20.00	5	23.81	11	21.57
Teacher or minister	2	6.67	0	0.00	2	3.92
Someone else	1	3.33	2	9.52	3	5.89
Asked no advice	12	40.00	4	19.05	16	31.36
Total responses	30	100.00	21	100.00	51	100.00
No response	0		0		0	
Information not available	11		15		16	
Total N	41		26		67	

Table 50

MOBILITY WHILE GROWING UP OF LOW GROUP SURVIVORS

Response	Male		Female		Both	
	N	%	N	%	N	%
Lived in same area all the time	30	90.91	20	80.00	50	86.21
Moved once or twice to another part of country	1	3.03	4	16.00	5	8.62
Moved great deal to various parts of country	2	6.06	1	4.00	3	5.17
Total responses	33	100.00	25	100.00	58	100.00
No response	0		0		0	
Information not available	8		1		9	
Total N	41		26		67	

Table 51

PLACE OF RESIDENCE WHILE GROWING UP LOW GROUP

Response	Male		Female		Both	
	N	%	N	%	N	%
Lived with parents	37	90.24	22	88.00	59	89.39
Lived with other relatives	1	2.44	1	4.00	2	3.03
Lived in an institution	3	7.32	2	8.00	5	7.58
Lived with some other family	0	0.00	0	0.00	0	0.00
Total responses	41	100.00	25	100.00	66	100.00
No response	0		0		0	
Information not available	0		1		1	
Total N	41		26		67	

Table 52. EMPLOYMENT OF MOTHER OF LOW GROUP SUBJECTS
ACCORDING TO AGE OF SUBJECT

Response	Male		Female		Both	
	N	%	N	%	N	%
Not employed	24	72.73	12	57.14	36	66.67
Yes, before the subject was 6 years old	3	9.09	3	14.29	6	11.11
Yes, when the subject was 6 - 11 years old	1	3.03	3	14.29	4	7.41
Yes, started when subject was 12- 18 years old	0	0.00	1	4.76	1	1.85
Yes, started after subject was 18 years old	0	0.00	1	4.76	1	1.85
Mother was dead or absent from home	1	3.03	0	0.00	1	1.85
Total responses	33	100.00	21	100.00	54	100.00
No response	0		0		0	
Information not available	8		5		13	
Total N	41		26		67	

Table 53
AGE AT TIME OF MARRIAGE OF LOW GROUP SUBJECTS

Age	Male		Female		Both	
	N	%	N	%	N	%
Less than 18	0	0.00	3	14.29	3	5.36
18 - 20 years	2	5.71	5	23.81	7	12.50
21 - 25 years	16	45.71	6	28.57	22	39.29
26 - 30 years	5	14.29	0	0.00	5	8.93
Over 31 years	7	20.00	3	14.29	10	17.85
Not married	5	14.29	4	19.04	9	16.07
Total responses	35	100.00	21	100.00	56	100.00
No response	2		4		6	
Information not available	4		1		5	
Total N	41		26		67	

Table 54

ATTENDANCE AT CHURCH OR SUNDAY SCHOOL DURING CHILDHOOD, LOW GROUP

Attendance	Male		Female		Both	
	N	%	N	%	N	%
Often	17	56.67	15	68.18	32	61.54
Occasionally	7	23.33	5	22.73	12	23.08
Never	6	20.00	2	9.09	8	15.38
Total responses	30	100.00	22	100.00	52	100.00
No response	0		0		0	
Information not available	11		4		15	
Total N	41		26		67	

Table 55

PATTERN OF FRIENDSHIPS WHILE IN SCHOOL, LOW GROUP

Type of Pattern	Male		Female		Both	
	N	%	N	%	N	%
No friendships at all	11	37.93	10	45.45	21	41.18
Friendly with few, on rare occasions	6	20.69	3	13.64	9	17.65
Friendly with some, but seen irregularly	6	20.69	4	18.18	10	19.61
See some regularly	4	13.79	2	9.09	6	11.76
Close friends with quite a few	2	6.90	3	13.64	5	9.80
Total responses	29	100.00	22	100.00	51	100.00
No response	0		0		0	
Information not available	12		4		16	
Total N	41		26		67	

Tables 56 to 63 describe vocation-related items. Parents helped the subjects little in finding life work. Sixty-five per cent of the males and 85 per cent of the females reported that their parents showed little or no interest. Although they were without guidance, work-life started early: one out of six began before age 18, half before age 17. Job skills were usually learned on the job rather than at home or at school. More than a fourth got no job information at all; about a third received information about work from their parents; only about 10 per cent profited from school information. Part-time work patterns ranged from none at all for half the females and a third of the males to most out-of-school hours for another third of males.

Table 56

PARENTS' FEELINGS ON LIFEWORK OF LOW GROUP SUBJECTS

Response	Male		Female		Both	
	N	%	N	%	N	%
Had strong feelings and emphasized their desires	5	17.24	0	0.00	5	10.20
Were interested and helped subject decide	2	6.90	3	15.00	5	10.20
Were interested but did not understand subject's desires	3	10.34	0	0.00	3	6.13
Actively opposed subject's choice	0	0.00	0	0.00	0	0.00
Showed little or no interest or response	19	65.52	17	85.00	36	73.47
Total responses	29	100.00	20	100.00	49	100.00
No response	3		2		5	
Information not available	9		4		13	
Total N	41		25		67	

Table 57

AGE OF LOW GROUP SUBJECTS WHEN FIRST PAYING JOB WAS HELD

Age	Male		Female		Both	
	N	%	N	%	N	%
Younger than 14	7	17.95	3	12.50	10	15.87
14 - 16	12	30.76	10	41.66	22	34.92
17 - 19	16	41.03	8	33.33	24	38.10
20 - 22	2	5.13	1	4.17	3	4.76
Over 22	2	5.13	1	4.17	3	4.76
Never worked	0	0.00	1	4.17	1	1.59
Total responses	39	100.00	24	100.00	63	100.00
No response	0		0		0	
Information not available	2		2		4	
Total N	41		26		67	

Table 58

PLACE JOB SKILLS WERE PRIMARILY LEARNED, LOW GROUP

Response	Male		Female		Both	
	N	%	N	%	N	%
School vocational training program	0	0.00	3	16.67	3	6.13
From parents or relatives	2	6.45	3	16.67	5	10.20
On the job	27	87.10	10	55.55	37	75.51
In the military	2	6.45	0	0.00	2	4.08
Somewhere else	0	0.00	2	11.11	2	4.08
Total responses	31	100.00	18	100.00	49	100.00
No response	0		3		3	
Information not available	10		5		15	
Total N	41		26		67	

Table 59

**SOURCE OF MOST HELPFUL INFORMATION ABOUT WORK
WHILE OF SCHOOL AGE LOW GROUP**

Source	Male		Female		Both	
	N	%	N	%	N	%
Parents	6	21.43	9	47.37	15	31.91
Older brothers and sisters	2	7.14	0	0.00	2	4.26
School	2	7.14	3	15.79	5	10.64
Friend	1	3.57	1	5.26	2	4.26
An employer	8	28.58	1	5.26	9	19.15
Home (private)	0	0.00	0	0.00	0	0.00
Home (public)	0	0.00	0	0.00	0	0.00
Private agency	0	0.00	0	0.00	0	0.00
No one	9	32.14	5	26.32	14	29.78
Total responses	28	100.00	19	100.00	47	100.00
No response	1		1		2	
Information not available	12		6		18	
Total N	41		26		67	

Table 60

TYPE OF WORK PREFERRED BY LOW GROUP SUBJECTS

Type	Male		Female		Both	
	N	%	N	%	N	%
Physical	21	80.77	14	93.33	35	85.37
Mental	4	15.38	1	6.67	5	12.20
No preference	1	3.85	0	0.00	1	2.43
Total responses	26	100.00	15	100.00	41	100.00
No response	4		6		10	
Information not available	11		5		16	
Total N	41		26		67	

Table 61
TYPE OF WORK PREFERRED BY LOW GROUP SUBJECTS

Type of Work	Male		Female		Both	
	N	%	N	%	N	%
With people	7	25.00	10	58.82	17	37.78
With things	10	35.71	4	23.53	14	31.71
No preference	11	39.29	3	17.65	14	31.11
Total responses	28	100.00	17	100.00	45	100.00
No response	2		4		6	
Information not available	11		5		16	
Total N	41		26		67	

Table 62
FATHER'S OCCUPATION OF LOW GROUP SUBJECTS

Occupation	Male		Female		Both	
	N	%	N	%	N	%
Unskilled labor	23	57.50	12	48.00	35	53.85
Semiskilled labor	8	20.00	3	12.00	11	16.92
Skilled labor	8	20.00	7	28.00	15	23.08
Office worker	0	0.00	0	0.00	0	0.00
Businessman	1	2.50	2	8.00	3	4.61
Professional man	0	0.00	1	4.00	1	1.54
Total responses	40	100.00	25	100.00	65	100.00
No response	0		0		0	
Information not available	1		1		2	
Total N	41		26		67	

Table 63
VARIABILITY IN LIFE WORK OF LOW GROUP SUBJECTS

Degree of change	Male		Female		Both	
	N	%	N	%	N	%
Worked at same job without much change since leaving school	5	12.20	9	40.91	14	22.22
Changed jobs occasionally but remained in same occupation	4	9.76	4	18.18	8	12.70
Tried several different occupations	28	68.28	7	31.82	35	55.56
Worked at one occupation most of time with occasional periods at some other	4	9.76	2	9.09	6	9.52
Total responses	41	100.00	22	100.00	63	100.00
No response	0		4		4	
Information not available	0		0		0	
Total N	41		26		67	

Table 64
YEARS OF FORMAL SCHOOLING COMPLETED BY LOW GROUP SUBJECTS

Years	Male		Female		Both	
	N	%	N	%	N	%
Junior High School or less	35	89.74	17	70.84	52	82.54
Some high school but did not graduate	4	11.26	5	20.83	9	14.29
Graduated from high school	0	0.00	0	0.00	0	0.00
High school and some college	0	0.00	2	8.33	2	3.17
Graduated from college or more	0	0.00	0	0.00	0	0.00
Total responses	39	100.00	24	100.00	63	100.00
No response	2		1		3	
Information not available	0		1		1	
Total N	41		26		67	

Table 65

FEELING ABOUT SCHOOL WHILE GROWING-UP LOW GROUP SUBJECTS

Feelings	Male		Female		Both	
	N	%	N	%	N	%
Liked it	2	7.14	7	36.84	9	19.15
Liked it most of the time	9	32.14	8	42.11	17	36.17
Just accepted it as necessary	10	35.71	2	10.53	12	25.53
Often a little unhappy about it	1	3.57	1	5.26	2	4.26
Really disliked it and was happy to get out	6	21.44	1	5.26	7	14.89
Total responses	28	100.00	19	100.00	47	100.00
No response	2		2		4	
Information not available	11		5		16	
Total N	41		26		67	

Table 66

NUMBER OF PERSONS DEPENDENT FOR SUPPORT ON LOW GROUP SUBJECTS

Number	Male		Female		Both	
	N	%	N	%	N	%
None	7	18.42	19	86.36	26	43.33
1	20	52.63	2	9.09	22	36.67
2 or 3	10	26.32	1	4.55	11	18.33
4 or 5	0	0.00	0	0.00	0	0.00
More than 5	1	2.63	0	0.00	1	1.67
Total responses	38	100.00	22	100.00	60	100.00
No response	0		2		2	
Information not available	3		2		5	
Total N	41		26		67	

The great majority of subjects did not get beyond junior high school. A few attended but did not finish high school while, surprisingly, two females finished high school and had some work beyond. Attitudes toward school covered a great range, from a third of females liking school to 20 per cent of males disliking and being happy to escape school attendance.

From Table 67 it is apparent that many of the subjects married spouses better educated than themselves. More than a third of spouses of males interviewed had at least a high school education and more than 15 per cent of females married high school graduates. Most married at their own social and educational level.

Table 67

LEVEL OF EDUCATION OF SPOUSE OF LOW GROUP SUBJECTS

Level	Male		Female		Both	
	N	%	N	%	N	%
Did not finish grammar school	5	18.52	8	47.06	13	29.55
Finished grammar school but not high school	12	44.44	6	35.29	18	40.91
Finished high school	7	25.93	2	11.76	9	20.45
Had some college work	3	11.11	1	5.89	4	9.09
Completed college	0	0.00	0	0.00	0	0.00
Total responses	27	100.00	17	100.00	44	100.00
No response	2		4		6	
Information not available	12		5		17	
Total N	41		26		67	

Table 68

**SELF-EVALUATION OF PERIOD OF MOST EFFICIENT PERFORMANCE
LOW GROUP SUBJECTS**

Time	Male		Female		Both	
	N	%	N	%	N	%
Sometime in past	15	53.57	12	63.16	27	57.45
About now	4	14.29	2	10.53	6	12.77
Sometime in future	1	3.56	0	0.00	1	2.13
Doubt there is "peak period"	4	14.29	1	5.26	5	10.63
Can't be sure	4	14.29	4	21.05	8	17.02
Total responses	28	100.00	19	100.00	47	100.00
No response	0		2		2	
Information not available	13		5		18	
Total N	41		26		67	

Table 69

AMOUNT OF OUT-OF-STATE TRAVEL OF LOW GROUP SUBJECTS

Amount	Male		Female		Both	
	N	%	N	%	N	%
Very little	14	41.18	10	47.62	24	43.64
A moderate amount	13	38.24	6	28.57	19	34.55
Great deal	7	20.58	5	23.81	12	21.81
Total responses	34	100.00	21	100.00	55	100.00
No response	0		0		0	
Information not available	7		5		12	
Total N	41		26		67	

Table 70

MOBILITY IN LAST TEN YEARS OF LOW GROUP SUBJECTS

Lived in	Male		Female		Both	
	N	%	N	%	N	%
One home	19	47.50	10	43.48	29	46.03
Several homes in one city	12	30.00	9	39.13	21	33.33
Two cities	5	12.50	2	8.69	7	11.11
Three to five cities	4	10.00	1	4.35	5	7.94
More than five cities	0	0.00	1	4.35	1	1.59
Total responses	40	100.00	23	100.00	63	100.00
No response	0		0		0	
Information not available	1		3		4	
Total N	41		26		67	

Table 71

TYPE OF WORK PREFERRED BY LOW GROUP SUBJECTS

Type of Work	Male		Female		Both	
	N	%	N	%	N	%
Indoor	6	20.69	13	72.22	19	40.43
Outdoor	21	72.41	4	22.22	25	53.19
No preference	2	6.90	1	5.56	3	6.38
Total responses	29	100.00	18	100.00	47	100.00
No response	1		3		4	
Information not available	11		5		16	
Total N	41		26		67	

Table 72

AMOUNT OF PART-TIME WORK WHILE IN SCHOOL OF LOW GROUP SUBJECTS

Amount of time	Male		Female		Both	
	N	%	N	%	N	%
Worked most of hours out of school	10	32.26	3	15.79	13	26.00
Worked regularly in out-of-school hours but saved time for study and recreation	1	3.22	1	5.26	2	4.00
Worked only occasionally in out-of-school hours	10	32.26	4	21.05	14	28.00
Almost never worked	10	32.26	11	57.90	21	42.00
Total responses	31	100.00	19	100.00	50	100.00
No response	2		2		4	
Information not available	8		5		13	
Total N	41		26		67	

The general impression to be gained from studying these questionnaires is of a great range of experiences but with a painfully large proportion of the group--especially males--having grown up with little guidance or care at home, with little help at school (especially vocationally), and with being left pretty much to the mercy of chance contacts and experiences in the adult world.

Data for the Middle and High Groups will be shown in tables included in Appendix A but numbered in continuity with those of the Low Group. This procedure was adopted because of the relatively limited number of life history reports and consequent restriction of opportunity for analysis.

Middle Group

Health and appearance advice came primarily from both parents-- nearly 80 per cent of males so reported and nearly 60 per cent of females-- with the rest of subjects being advised by a variety of other adults. Parents, one or both, were the principal source of advice in general, while 13 per cent had received or had sought no advice at all. Seventy per cent reported frequent Sunday School attendance. (Tables 73 to 80 in Appendix F)

Nearly half the interviewees reported parents interested and helpful in work choice while a fourth reported parents uninterested. For 80 per cent of the subjects job skills were learned on the job; for 12 per cent in a school vocational program. More than a fourth of males began working before age 14, and 30 per cent of males and 26 per cent of females reported working "most out-of-school hours." (Tables 81 to 89)

Approximately 60 per cent of the Middle Group subjects went to school beyond junior high school. This included 12 subjects who attended college and three more who graduated. While the majority of these subjects were not enthusiastic about school, only about one in ten really disliked it. About 60 per cent reported having spouses who were at least high school graduates, suggesting that they tended to marry "upward" educationally. This was true for both sexes. (Tables 90 through 96)

High Group

The number of subjects interviewed from the High Group was not large; the representativeness of the group may therefore be questioned. There is however, no evidence of sampling bias; hence the responses may be taken to be representative of an average or better than average

segment of society. Health and appearance instruction came primarily from parents and family. Advice was sought in about three-fourths of the cases from parents; in 12 per cent of the cases no advice was sought. Mothers were generally not employed. Three-fourths of subjects did not marry until they were over 21. All subjects reported frequent or occasional Sunday School attendance. (Tables 97 to 104)

Only 16 per cent of parents did not express interest in their children's life work plans. A third of parents were markedly directive regarding this matter.

Two-thirds of the respondents worked part time while in school; a fifth worked most out-of-school hours. Two-thirds learned their marketable skills on the job while 20 per cent were prepared by a school program. (Tables 105 through 113)

Educational level of this group is very high. A third graduated from college; only one subject had no more than junior high school training. Spouses were in general even better educated than the subjects of the High Group. (Tables 114 through 120)

In general these subjects as children were taught and oriented at home and had the advantage of parental advice and support plus good educational experiences.

Summary Discussion of Life History Questionnaires

An examination of the tables setting forth life experiences reported by the three groups reveals striking differences. For any experience which may be evaluated as likely to be desirable (e.g., having interested and helpful parents), the responses of Low, Middle, and High Group subjects appear in a stair-step fashion. While not invariable, the tendency is very strong. However, the Middle Group on some items

resembles Low or High rather than maintaining an intermediate position.

The plight of the Low Group subjects becomes even more apparent when they are compared to the other groups. It must of course be remembered that the Middle Group was of poor ability ("dull" was the term used in the early study) and the High Group was and remained generally in the average range.

The Low Group subjects differed in the following ways from the other two groups:

- Less likely to have had health and appearance instruction

- More likely to have had no one to advise them

- Less likely to have been living with parents

- Less likely to have had mother at home in preschool years

- Less likely to have attended Sunday School

- Much less likely to have had parents interested in their future life work

- Less likely to have acquired job skills in a school vocational program

- More likely to have unskilled laborer for father

- Likely to have had much less education

- Less likely in maturity to be supporting anyone but self.

- More likely to have spouse with little education (though generally with more than subject's own)

- Much less likely to view their own future performance optimistically

- Less likely to have traveled out of state

An examination of the life-histories of this Low Group brings to mind the phrase "culturally deprived." Home, school, and community were all inadequate.

How then did the subjects of the Low Group fare as well as they did?

One answer is time--they had to learn from experience in society rather than from the home. This necessity forced a slow and fumbling start, and much experience of failure. This "slow start" was reflected in the records of many subjects whose adolescent and early adult years were marked by delinquency, dependence on relief, and generally poor adjustment, but whose later adult lives were reasonably satisfactory.

Then, while there were not many specific allusions in the records, it must be remembered that one of the criteria for inclusion in the Low Group was experience in Lincoln's "Opportunity Room." There is an inclination in some quarters today to question the value of special classes (the research in the area warrants serious consideration, see Johnson, 1962). In the post World War I period, however, when most subjects were in elementary school, it was almost literally the "Opportunity Room" or nothing.

Examining the responses of Low Group subjects to many of the questions reveals that there were persons and agencies besides the family who were interested and helpful. This help was not systematic nor available to all but for certain individuals it was critical. Some questions and responses follow.

"Who taught you about health and appearance?": "Someone in an institution where I lived." "The military." "A teacher."

"Who gave you advice when you asked for it?": "A teacher." "Someone else who was important to me."

"Who gave you most helpful information about work when you were of school age?": "Teachers." "A friend." "An employer."

(Numerous employer responses were made)

One social agency rather conspicuously missing from the "helpful"

category is the church. For the most part the Low Group subjects avoided the church and the church avoided them. In fact it would be accurate to report that no agency more than the school (through the "Opportunity Room") concerned itself with these children. Welfare organizations (especially a state home for orphaned children) entered quite importantly into the lives of some of the children.

Although the Middle Group subjects too were of poor ability, there was no special schooling available to them. While the life-history responses make it clear that they had better home experiences than the Low Group, the similarity of their adult adjustment (albeit generally somewhat better than the Low Group) suggests that the Middle Group too might have profited from more school and community concern.

Chapter 6

WORD PORTRAITS OF RELATIVELY SUCCESSFUL
AND RELATIVELY UNSUCCESSFUL LOW GROUP SUBJECTS

The purpose of the life history sketches that follow is to identify in them certain characteristics and associated factors that tend with considerable regularity to contrast the relatively successful with the relatively unsuccessful members of the low mentality group. Four different sets of portraits will be presented. First there are some that are descriptive of relatively successful males. These are followed by some that describe relatively unsuccessful males. Third, there are portraits of relatively successful women. Finally there are portraits of relatively unsuccessful women. The first sketch in each of the four groups is considered by the writers as being one which, more than any other, contains the kinds of features and conditions descriptive not only of the other members of a given small group but also of the members of the larger sample from which it was drawn. One can, for example, find in the portrait of Jack M. a comparatively large number of the factors that are apparent in other relatively successful low ability males; no other male exhibits these traits and related conditions in so pronounced a way.

It is the writers' hope that the word portraits can supply some understanding about the Low Group subjects that will effectively supplement the tabular data given elsewhere in the report. Tabular data consisting of group averages and similar kinds of statistical description tend to obscure the "flavor" of individual life. Many of the Low Group subjects especially were well known personally to the principal investigator, and cumulative records are quite detailed on many of them. As Mary C. Jones says in commenting on some individuals of the California Growth studies,

"Neither computers, case numbers, group averages nor theoretical formulations can separately, or combined, submerge the individual if you know the data as persons." (italics added, Jones, 1964)

Each of the categories consists of four individuals. Selection as "relatively successful" or "relatively unsuccessful" was made on the basis of the subjects' economic self-sufficiency and satisfactoriness of employment, the level of his occupation, the home and family life, the status of his activity in his community, and the quality of his relationship to life in general. Social data records, interview forms, and the researchers' personal acquaintance with the subjects were used as the bases for selections.

At the beginning of each of the sixteen portraits will be found a name (a pseudonym) plus a number in parenthesis followed by a date. The number in parenthesis represents the highest intelligence quotient recorded for the subject during the time that he was in school. It should be recalled that most of the subjects of the study took at least two individual mental tests during the time that they were in school. The date that follows the parenthesis is the individual's birthdate.

Relatively Successful Low Ability Males

Jack M. (68) 1903

Jack's life history as mentioned above has a number of features in common with the larger proportion of relatively successful Low Group males. His first work (except for after-school odd jobs during his early teens) was for a well established manufacturing firm. After nearly seven years employment with this company and largely because of his record of trustworthiness and conscientious effort even in quite unskilled tasks, he secured a steady job in the equipment building shops

of a major railway company. He had remained in this work for more than 20 years when he was interviewed in 1963. Securing work with a relatively large and well established company is the first of the features alluded to above.

A second feature of some apparent importance in Jack's record is that of acceptance of himself as a worthwhile person because of his willingness to "stay by a job" and do his best in it "even if it wasn't much to look up to." The relatively successful males of the Low Group quite consistently exhibit this attitude toward work.

Jack did not marry early ("I guess I was too busy and didn't have the money.") He was 29 when he married. The woman he married was some three years younger, had completed two years of high school, was well trained by her own mother in housekeeping, enjoyed church attendance, and had considerable interest in music. She was described by one interviewer as "very clean and nice appearing."

The fact that Jack's marital life has been characterized by stability and congeniality constitutes a fairly consistent common denominator. He and his wife and their one son (now grown and father of two children) were, and are, regular in church attendance. Jack played in a small band "combo" as a drummer largely for his own enjoyment until quite recently after "teaching myself" nearly 30 years ago. Jack's wife works as an "ironing woman" for a successful and long established laundry; she has remained at this job since leaving school to marry Jack.

Jack and his wife share several recreational and other avocational interests. He mentioned with quite evident pride his membership in the "Moose Lodge"; he had considerable fishing equipment on display to prove his devotion--and that of his wife--to this form of sport; and

he emphasized the regularity of his attendance at "The Railroad Veterans' Club."

Neither Jack nor his wife has any history of serious illness or accidents. The remark, "a couple of little operations--that's all", appears to sum up the family medical history.

At the time of this writing Jack and his wife live in what the interviewer described as, "a nice, neat, well-kept-up six room house that has an attractive back yard." The property is owned by Jack and his wife who occupy three rooms and rent the other three to another married couple. The house would be valued from \$9,000 to \$10,000 on the present Lincoln market. Jack and his wife have lived at this one address for 30 years--practically their entire married life.

The comparatively long residence in one place is still another life history feature that characterizes the more successful of the Low Group males. Remaining in the same city but moving fairly regularly is descriptive--on the other hand--of the less successful males.

In one respect Jack differs from the majority of the relatively successful low ability males. He disavows any feeling that there were certain persons who were particularly important for the way they influenced his life; none, that is, except his wife. Additionally (and unlike most of the successful males) he finds nothing of any significance to attribute to his school experience. He remarked, "I went to school just because I had to."

Everett G. (68) 1909

Perhaps Everett G. represents the ultimate for the low ability group in occupational achievement. His accomplishments have been considerable for a person of his intellectual ability (Binet I.Q. of 66 and 68 on

two tests given between age 10 and 14). For this ability level a record of lack of success would not be surprising--a record that might well have shown difficulty in securing and holding jobs, limited success in marriage, problems with locating suitable residences and the like. Such instability has not characterized Everett's life.

Everett's father was employed as a skilled machinist and was able to provide satisfactorily, though on a marginal basis, for his family without resorting to social agency assistance. With difficulty but with parental encouragement, Everett was able to go beyond the opportunity room and complete the tenth grade in school.

After leaving school Everett followed a variety of occupations ranging from being a tap dance entertainer to a truck driver to service in the Army during World War II. After his service in the Army he settled in an occupation which has not changed in the last 20 years. Following a dozen years of employment in the different phases of the dry cleaning business he has during the past eight years been manager of such an enterprise.

Everett married when he was 23. His wife is "a physically attractive, neat appearing woman." He has three children. Since Everett's marriage he has demonstrated traits which appear to have characterized his parents while he was a child; the traits include concern for children, provision of adequate food and clothing for a family, and responsibility in his work.

Everett and his family live in an older home, but one that is clean both inside and outside; a home in which there is new furniture and some luxuries (such as air conditioning). The members of the family give evidence of pride in their home and in their own personal appearance. The house in which the family lives (one in which they evidently have

at least a \$4,000 equity) would sell on the 1965 market for approximately \$8,500. This contrasts sharply with Everett's boyhood addresses which included at least four exceedingly low rent flats on "main street" near the railroad tracks and two dilapidated shacks in what was at the time the city's most impoverished housing area.

Everett is extremely reluctant to discuss the details of his early experience, his attitudes toward school, his feelings about his parents, or his identification of persons who contributed to his successes in life. The conclusions about his success can only be inferred from observation and a few guarded remarks. While he avoids the mention of any person or persons who during his years in school influenced him in some special way, he did agree with an interrogator's speculation, "You were fortunate, don't you believe, that you were persuaded to stay in school long enough to become quite good at such things as reading and arithmetic?" (He has reason to be proud of his "accurate bookkeeping" in his managerial position.)

Rocky F. (66) 1908

Rocky has benefited in various ways since his years in school from talents associated with quick reflexes, physical durability, and "a fighting disposition" (the last mentioned trait was identified and thus described when Rocky was 13 years of age). He seemed almost completely incapable of reading while he spent eight years in the opportunity room and showed only slightly more aptitude in other school subjects. With his fists, however, he displayed a resourcefulness that soon brought him to the attention of boxing promoters not only locally but regionally. An older brother (Rocky was one of seven children in the family)

became the manager for a boxing career that established Rocky as one of the very great "fighters" of his generation.

Earnings as a professional boxer enabled Rocky not only to surround himself with many physical comforts--even luxuries--but to invest in enterprises that became more than adequate replacements monetarily and otherwise for the benefits which were realized from boxing. Doubtless, the business acumen of the older brother had much to do with these successes. Rocky and his "attractive, musically quite talented" wife own a home presently valued above \$40,000. He has provided generously for the physical comforts of his parents and for other relatives, and he enjoys the close friendship (and companionship) of a number of socially influential persons who for the most part shared vicariously in his triumphs as a boxer and have remained loyal to him.

It is not easy, in Rocky's case, to identify particular persons who symbolized for him what he could aspire to be. Nothing in the life history information does much to clarify this point. His climb from a very inauspicious start--intellectual inadequacy, rather obnoxious behavior (his pugnacious tendencies), a catch-as-catch-can economic background--appears in the main to have hinged upon the perceptiveness and ingenuity of his older brother in identifying Rocky's unusual fistic potential and in "pacing" its development.

Is the combination of quick reflexes, hard fists, and physical toughness to be included among the aptitudes to which schools have reference in the mention of "broad spectrum assessment of human potential"? Whatever the answer to the question as stated, it may at least be noted that whereas some considerable number of youngsters have become deeply embroiled in trouble with the school and/or the law for vigorous use of

such "talents," Rocky as mentioned, appears to have had his capabilities constructively directed if not actively encouraged by the school and other social agencies.

An additional question may be raised as to whether recognition as a champion "prize fighter" is to be deemed some part of the substance of "success." Admittedly, this is hardly the kind of question for which one person's life history can be made the basis for a generalized answer. The warranted answer is that in this particular case (Rocky's case) unusual proficiency as a professional boxer opened the doors to many other rewarding experiences. Probably of much more relevance to the question of success is that Rocky clearly seems to enjoy life; he is not only self-supporting but able and much interested in supporting other persons; he is altogether law abiding; and he contributes time and money to community betterment activities.

John C. (70) 1904

Becoming a socially responsible, self-supporting adult after a childhood experience of family poverty and a personal history of poor academic accomplishment is a one sentence summary of the life of John.

John's father was an unskilled laborer who was employed as a "handy man" by a street car firm; his mother was also accustomed to "lots of hard work." Although the family's material possessions were extremely limited, the parents provided John with a background of genuine interest in him, regular church and school attendance, and stability of residence. John recalls that he liked school "most of the time," and in retrospect his decision to leave school before "graduation" is one which he seriously questions. Although he was counseled to stay in school he feels that the schools "didn't encourage

you like they do now to stay in; they sort of expected you to quit in those days to go to work."

John quit school to go to work in what appears to have been for him a fortunately well chosen position which has been his life-long occupation. He received apprentice training as a barber and was eventually able to start his own business. He has owned his own barber shop in the same location since 1935 and has found occupational success and pleasure in "working with people."

John is married and has one living child. His wife, a pleasant woman of apparently average intelligence, has held a job in the office of a large department store since 1925. The couple owns a home (valued at approximately \$9,000 on the 1965 market) as well as an additional property which is divided into apartments. The home is not an impressive one, but it is well kept both outside and inside; it is freshly painted and bears the marks of a good housekeeper and a conscientious owner.

John votes in elections; he is a member of a church; he takes pride in telling of his attendance at meetings of the Parent-Teachers Association. He enjoys fishing, hunting, and other kinds of outdoor activities; he has a house trailer which enables him and his wife to participate in these kinds of recreations.

The above mentioned facts along with John's encouragement of his daughter in her schooling as well as his encouragement of schooling for two grandchildren are indicative not only of his status as a self-supporting person but of his identification with society's provisions for human betterment. A recapitulation of what has been said about John might properly underscore the following points. John received helpful parental guidance as a child; he remained in school beyond the age for

completion of the elementary grades; he benefited from good vocational training; he steadfastly devoted himself to an occupation; and he has maintained residential stability. He married a person of at least average intelligence, a person who has a sense of responsibility both to her work and her home. He exhibits a strong feeling of self-significance; he shows modest but unmistakable pride in his work, in his ownership of property, in his association with accepted social organizations. He reported having numerous kinds of experiences that "give a lot of fun"; in this connection he mentioned especially his out-of-doors recreations.

Relatively Unsuccessful Low Ability Males

Introductory remarks pertaining to the characteristics and associated factors related to relatively limited success of low ability subjects are, the writers believe, unnecessary. The exposition can best be inferred as the following word portraits are compared with those already presented.

Carl W. (54) 1909

When Clarence W. (Carl's father) talked about his ten children, he was not hesitant about singling out one of them as "no good." That child was Carl. Today Carl has similarly rejective feelings about his parents for he does not view them as making any contribution to his life except for providing the basic essentials until he quite school in the third grade. In Carl's eyes he is a self-made man, and he owes all that he is to himself. He taught himself what he needed to know about work, personal appearance, and life in general; he thinks so little of the guidance of his parents that he can no longer remember what his father's occupation was.

Similarly he thinks so little of the contribution of the schools that he can no longer utilize anything that he was taught in the schools or even remember how he felt about them. School for Carl was one frustrating experience after another for he could not or did not want to learn anything offered by the school. When the expectations became too demanding in the third grade he simply quit attending with no regrets at the time or now.

He says as a description of his entry into the working world, "I quit school while I was in the third grade and grabbed the first train out of here and I've been on my own ever since." Being on his own has meant a succession of jobs in definitely unskilled labor connected with farming, construction, and mining. These jobs have taken him all over the country; although he has always returned to his childhood home, he has continued to be highly mobile and has lived in from three to five different cities in the past ten years.

In describing himself as a self-made man, Carl says, "I ain't never asked no one for nothing." He sees no contradiction between his denial of any outside influences or help in his life and his total support today by welfare agencies. As is often the case in such families, Carl continued the pattern characteristic of his parents who relied on welfare support for more than half of their subsistence. Carl claims his right to such support because, "I hurt my back in the mines and two years ago I fell off of a ladder and since then I can't do nothing. We're getting \$254 a month from the government and my lawyers are fighting for the \$4,000 I got coming from compensation."

Carl is presently living with his second wife in a rented home. They have five children and "Two hundred fifty dollars a month don't go

far with these five kids of mine." Totally dependent upon outside sources for their subsistence, the W. family is living in a precarious economic situation with little anticipation of increased income. Carl's life has followed a pattern characteristic of a large percentage of the relatively unsuccessful low ability subjects. It is a pattern of early withdrawal from school, transient residential status, unskilled labor, and reliance on social welfare for much of life's requirements. His success has been minimal.

Clifford H. (57) 1912

Clifford H.'s childhood experiences consisted in large measure of difficulties related to poverty, strained relationships with his parents, brushes with the law, and escapes from the school attendance officers. His record is replete with references to the efforts made by the school to improve his attendance and that of his three brothers.

Before Clifford and his brothers were of voting age they had spent almost a third as much time in a reformatory for young boys as they had spent in the public schools. Before Clifford was 20 years of age he had twice been committed to a reform school for auto theft. Specifically, Clifford spent one five-year term in a reform school for auto theft; he spent another two-year term before he was 23 years of age in the state penitentiary--again for theft involving automobiles. Appearing in police and juvenile court records are at least a half dozen mentions of Clifford's involvement in "disorderly house raids," charges of responsibility for pregnancies of teen-age girls, and "disturbances of the peace." Between age 30 and 40 Clifford was summoned into court on several occasions for child abandonment, improper registration of motor vehicles, fights in which other persons were seriously injured, and several thefts.

In the background of Clifford's experience is the record of a father whose arrests for robbery and disorderly conduct were numerous (notable were his frequent visits to disorderly houses which with some regularity were raided by the police). Clifford's mother is described in the records of various social agencies as an individual who seemed to care little for her children, who gave virtually no attention to housekeeping, who had a reputation of cohabiting with "several men," and who looked with much disfavor upon school and all that pertained to it. Of some special significance is the fact that an aunt of Clifford (on his mother's side) has two children who were among the relatively unsuccessful low ability subjects of this study. The aunt is also mother-in-law of still another relatively unsuccessful low ability individual. Clifford's mother married another man without a divorce from Clifford's father and then over a period of approximately a dozen years lived "alternately" with both men. An entry in the social agency record serves to sum up some part at least of the H. family's behavior pattern. The record reads: "This is a family in which the parents and the four older children have all during the past two years been treated for venereal disease." The four older children did not include Clifford who also was occasionally treated for venereal disease.

In spite of the many high hurdles that confronted Clifford, he managed to secure considerable part-time employment during his later teen-age years in auto mechanics and in other jobs of a similar nature. Since the age of 21 Clifford has held dozens of different jobs; most of them have related to auto mechanics and he refers to his present work as that of an auto mechanic. Records indicate that he earns barely enough money to pay for the living of his wife (this is his second wife)

and himself. He holds title to a house that would at best be valued not above \$4,500 in a city where "decent housing" would cost at the very least \$6,500. The home is dirty and very poorly furnished with the exception of a console television set. In connection with the mention of ownership it may be noted that Clifford's mother when she was interviewed surmised that Clifford "is buying a house but doesn't have very much work and isn't making much headway with paying on the house." She added, "He doesn't have very good health."

Clifford's general attitude toward the activities that make up his present existence may be summarized in such statements as: "I have a job but I don't like work at all. The only job I ever worked at is one that got me in one of my worst problems--I was almost burned to death in a fire which started when I upset a gasoline can while I was working with an automobile." (Clifford carries quite prominent scars from this accident which occurred nearly 20 years ago. Some additional quotes from Clifford tend to sum up his ideas about school and his attitude toward his leisure hours. "There is nothing that I do when I'm not at work that gives me any fun. . . I don't think I have any leisure time. . . The thing I remember best about school is teachers telling me what to do and always nagging me because I never seemed to do anything right." Clifford has the impression that schools today must be better than they were when he was enrolled because, "I don't think children today are nagged so much as when I was in school." Clifford in recent interviews has claimed that he completed high school; the school record which appears to be quite factual indicates that his last grade in school was 2-B and this grade level was one of which he attained in the so-called "Opportunity Room."

While Clifford has been inclined to move frequently from one address to another, for the most part he has remained within the city limits of Lincoln, Nebraska. One would infer that for most of his adulthood he has stayed at a given address until he was required to pay his rent at which point he simply moved on to another part of the city. He has only infrequently traveled beyond the boundaries of the state. This latter is in some contrast to the record of his brother Ben whose travels have taken him to various sections of the country ranging throughout the Midwest and to the Far West. Clifford's mobility pattern, however, is more characteristic of the low ability subjects of the study than is that of Ben. The subjects travel much but in a limited orbit.

Ben H. (60) 1905

Ben H. is one of the several siblings of Clifford H. He is the one member of the family who in adulthood is largely "disowned" by the other members of the H. family. The apparent reason for the family's unfavorable attitude toward Ben is his ability to earn more money and live in a better house than any other member of his family.

Following his school years ("Opportunity Room") Ben moved frequently, as already indicated, to various sections of the country. Since the 1940's the frequent changing of address has been discontinued and Ben's residency has been limited to Lincoln. At present he is purchasing a house in which he has resided for several years. (He evidently has only a very limited equity in it.)

Similar to the pattern of his mobility, Ben's work history has been a varied one; the pattern of his employment has been characterized by much change. His first job was similar to that of his father who was a sporadically employed plasterer. Until very recently Ben worked at numerous

unskilled and semiskilled jobs. For the most part his income was supplemented by relief aid. He presently "owns" [?] and operates a used car lot.

Ben's social adjustment history is characterized by variety--by "consistent inconsistency." During the years following school his life history contained mentions of violations of the law. Mainly the offenses were misdemeanors although Ben did serve two short terms in a school for boys with sentences imposed for car theft. On one other occasion, at age 25, he was sentenced to jail for defrauding an innkeeper of \$60. Like his brother Clifford, whose life history has already been described, Ben has a record of involving girls and, later, older women in trouble. One entry in his record speaks to this point. It reads, "This is the third girl who has been treated at the city clinic for venereal disease contracted from Ben H."

Two divorces and a third marriage took place during the years prior to age 40. Ben was first married at age 18 and his second marriage took place when he was 25 years of age. Since age 40 there has been a gradually diminishing record of law violations and Ben's family life has appeared to be relatively satisfactory. His present wife appears to be making most of the money that the family has to live on. The person who conducted the most recent (1963) interview with Ben referred to his wife as, "a friendly, rather good looking woman who has civil service employment." She evidently has regular employment at approximately \$250 per month. Ben has three children by his present wife and all are living at home but all have some work, though the work appears to be not very steady. There were children by the earlier marriages but the record indicates that they were allowed to live with the mothers and were never

claimed nor supported by Ben.

Some remarks made by Ben in the most recent interview coincide with the impression of some change in his view of himself and of his world. "If you're ever going to be anything, you have to find a job while you're young and stick with it. I sure wasted a lot of time by just grabbing any job that was there. You gotta find a job that you like and you can make a little money and stick with it. That's what I'm doing now and I should've done long ago."

Some of his thinking about education is contained in the comments: "Without education you can't get anywhere. By going to school you can get a better job and make a lot more money. Anybody that quits school is stupid. I knocked around and wasted a lot of time. Maybe I can help set some kids straight so they don't do the things I did and they can get started right."

Ben when he was interviewed at different times over a period of 30 years never could name anyone who favorably influenced his life. On one occasion he explained, "My parents sure were not much to look up to; they were not much to sit down and talk to--so us kids pretty much had to take care of ourselves."

George T. (70) 1909

In various respects George T. represents a conspicuous link in the continuity of three generations of a troublemaking family. Numerous mentions of this family's difficulties with the law appear in the records of municipal and county courts. There are also notations about the family in the records of relief agencies going back as far as 1916 when George was 7 years old. Before George was 17 years of age his family changed home addresses more than 20 times. Both his mother and his

father had employment that took them from the home for long hours and it was their practice to leave the five children in the care of neighbors for a good part of the time.

The manner in which George and his siblings became the not very welcome wards of the neighbors appears to have carried over into the later life style of George as the head of his own family. George was married at 24 years of age and had eight children. One frequent comment about George's own household is that there never seems to be any one place that they consider their family residence. George's children, particularly when they were of preschool age and early school age, roamed the neighborhood and were frequently "bedded down" in the homes of relatives and neighbors. Like George and his siblings, his own children were not very well fed or otherwise cared for; with considerable consistency they were subjects of social welfare attention.

George's work record throughout his life--like that of the majority of the less successful low ability subjects--has been a very spotty one. He has literally held dozens of short-time and part-time jobs. Explanations on the part of persons who have employed him may be summarized in the comments: "He is not dependable. He is unstable. He never seems to have the skills--limited as they were thought to be--that he claimed when he applied for work."

George's life with his immediate family has been a very stormy and also a very tragic one. He and his wife have, over the years, frequently separated only to rejoin each other. The entire family's "life style" is an unstable one. Further evidence supportive of this assertion includes the numerous difficulties that the eight children have gotten into with the law and their record of scholastic failures

and behavior problems in school. The children, three of whom at the present writing are of age and married, have had difficulty in holding a job. Like their father, they have managed to establish a reputation for irresponsibility and paucity of usable skills. One of George's sons was committed to a life sentence in the state penitentiary for homicide. George has been interviewed on at least three occasions as part of the present study. During none of the interviews has he been able to identify any person or any experience to which he attributes a salutary influence. He quite clearly finds little which gives him any sense of pride as he looks back over his life.

General Inferences from the Records of Eight Males

The four cases selected as the most successful males were men whose lives were characterized by stability. Each had acquired a particular skill early in his life and had worked at it with almost no change for years. Two were self-employed after an early "apprentice" period of working for someone else. The other two were employed by large organizations. There would seem to be significance in the fact that the men with the best records for the Low Group in general--not just this select sample--had in a sizeable percentage of cases worked throughout life for one large firm or organization (the Burlington Railroad most frequently). Many at the time of this writing were looking forward to company-supported retirement with these kinds of organizations.

The successful males tended to stay in a single (i.e., the same) community throughout their adult life. In some instances, however, this was not the community of the individual's childhood. They all married

well; they married better educated, personally "well adjusted" women who contributed stability and planning to their life. Marriage age varied from 22 to 32. From the record they could be said to be rather clearly family and occupation oriented.

The characteristics and associated conditions descriptive of the four least successful males contrasted considerably with those of the more successful males. They personified instability rather than stability. Two were described as emotionally unstable. One of these was said to be brain damaged ("kicked by a mule") but there was no medical evidence of such damage. They showed two striking personal-vocational traits:

- 1) none possessed a well developed skill; they drifted from one odd job to another almost never being engaged by a large organization; and 2)

they moved frequently from one place of residence to another.

Many of the unsuccessful males outside this sample exhibited the same drifting tendency just mentioned. Some established a sort of "circuit" which they followed, showing up eventually at given places

again and again. All four of the least successful male subjects while they were in their teens lost their fathers. The married life of all four has contained much discord and other kinds of trouble.

Subjects in the unsuccessful group were less fortunate than those of the successful group relative to help from their parents and/or other persons in their vocational planning. The same was true regarding

advice about personal appearance and personal health. Without exception they professed to think of no one to whom they could look for construc-

tive examples or for beneficial consultation at any time in their life.

Some of the unsuccessful males had some instances of mental illness, but none of them had been treated for it.

Relatively Successful Low Ability Females

As was suggested in the material which was interspersed between the discussion of the more successful and the less successful males, it would seem appropriate to defer the contrasting of the female groups until after all eight portraits have been presented. The reader may wish to re-examine the word portrait of Evelyn after reading the first of the sketches of the relatively unsuccessful females. The writers believe that significant contrasts having to do with success or the lack of success are particularly evident as these two persons are compared-- that is, as the sketch of Evelyn is compared with that of Pearl.

Evelyn J. (70) 1907

Childhood for Evelyn was a time of severe poverty and deprivation. There were eight children in her parental home, and most of Evelyn's out-of-school hours were spent in helping with the care of her brothers and sisters. Her father, an unskilled truck driver, was kept busy providing the money to meet the bare necessities of life for his family. Her mother was fully occupied with the care of the children; there was little time for any motherly attention to individual ones. The parents, however, seemed to instill in the children some hope for a better life. Evelyn says today, "I owe everything to the folks." The "everything" that she owes may be inferred from the progressively more satisfying life that followed her childhood.

Attendance at school was not a pleasant experience for Evelyn. The difficulties that she encountered in academic work are reflected in her reluctance to discuss her school experiences some thirty years after leaving the "Opportunity Room" at the end of "grade 7." She says only

that school was necessary and expresses the view, "Kids should take every advantage nowadays. Wish my folks had made me."

Evelyn began her paid working experience at the age of sixteen. During all but a few months of the seven years that she was employed, she worked as a "chocolate dipper" in a candy factory. The record shows that she was considered "a very good worker." She attributes her success in her work to an "old man who ran the candy company who asked me if I would like to learn to dip chocalets (sic), and so I did and I loved it." Work for Evelyn was enjoyed for its own sake; it was not simply a way to earn a living.

Evelyn married at the age of 23. Since her marriage she has spent her time in caring for a home, rearing three children, maintaining friendships, and more recently, working in such organizations as the PTA. The barriers imposed by a childhood environment of poverty were not insurmountable for Evelyn; her life testifies to the possibilities of social class mobility. Today she lives with her husband, a successful masonry contractor, in an attractive stone home well furnished on the inside and well landscaped. In a city where "average" housing would cost from \$16,000 to \$18,000 the house that Evelyn and her husband own would have a value between \$25,000 and \$30,000. Their leisure time is spent in a manner consistent with their level of income. They own a good motor boat and camping unit which are frequently utilized as they pursue their hobbies of camping and fishing.

Evelyn's participation in organizations, her regular appointments at the beauty parlor, her well-managed home, and leisure time activities seem to indicate concern for the maintenance of the higher social status which has been attained in spite of lower class beginnings. Evelyn

would appear to have attained top success for a person of her intellectual capabilities as assessed in childhood and again during her middle forties.

The first recorded individual mental test I.Q. rating was 65; the later rating was an I.Q. of 70.

Evelyn is quite clearly happy and contented with the way life has treated her. She has utilized her potential to good advantage, and she seems capable of inculcating middle class habits of thinking, believing, and working into the life of her three children.

Mary R. (64) 1907

During each of the interviews with Mary covering a period of 30 years (there were four such interviews) she presented much the same general appearance of self-sufficiency, considerable optimism and great devotion to her work and to persons closely related to her. She was married at the age of 17 and was deserted by her husband 15 years later. The husband left her with four children whose ages at the time were from one to fourteen years. She is now 59 years old.

Mary secured state assistance--aid to dependent children--for several years following the separation from her husband. There is no record of any financial help from him; the record indicates that he was an alcoholic and had seldom been able to hold employment for periods longer than two or three weeks at a time. When Mary's youngest child was 4 years old, she secured work as a housekeeper caring for an elderly person. She earned enough in this manner to support herself and her children.

In every record of interview with Mary there is mention of statements by her of the satisfaction she has found in "doing things with my hands." These statements were made in connection with descriptions of the kinds of work she has done.

of activity she liked best. They were also intended to indicate her distaste for school which had little in it that she could do with her hands. ("There was always too much sitting around in school.") By her comments Mary tried also to emphasize her satisfactions with sewing, cooking, and "making a home look clean and comfortable."

Mary attributes her success as a homemaker and a cook to the influence of "a real old lady whose name I won't mention but who helped me a lot in taking pride in the things I could do best." Mary refers to this old lady as "a close friend of my mother who could teach me some things my mother probably wanted me to know." There is some evidence that Mary was considerably devoted to her mother but never had very close association with her, partly because Mary had at an early age engaged in housekeeping, babysitting, and other kinds of away-from-home employment.

Mary's life history seems quite accurately to be summed up in the terms, "Early re-enforcement from persons who 'counted most' in her satisfactions with manual work well done, consequent strong commitment to good work for good work's sake (she professes not to care so much for the amount of her wages as for evidence that the product of her efforts is good), the ability to rebound fairly quickly from discouraging experiences (e.g., the divorce), considerable optimism, dogged determination to be self-sufficient." Recently her employer who manages a large cafeteria in Lincoln remarked, "She is one of the best cooks I have ever known. She can have a job here as long as she is able to work."

Connie B. (70) 1907

The only child of a Negro school janitor and his domestically employed wife, Connie learned before she was out of school the necessity

of working for wages. By the time she was 17 she had gained a reputation for dependability, honesty, and household duties well done. Because of this reputation she was employed for 10 years as a household maid to spend every day in the home of a university professor who paid her \$3.50 per week plus the providing of at least one meal per day. She lived at home during all but one of these years and "learned from my mother what I needed mostly to know--especially about work, saving money, and spiritual things." The one year when Connie lived away from home is rather vaguely described by persons who knew her then as, "the year when she married but left her husband." She was 19 years old at that time.

At 28 years of age Connie secured a job--through the recommendation of a close friend--as a "cleaning lady" in a well established gas and electric company in another state. There her sense of responsibility, her desire to try to learn, and her good personal appearance ("especially neat and clean" the record says) provided her the opportunities for small promotions as well as continuous employment in one place. Evidence of the regard in which she was held by her employers is contained in the fact that she had all her expenses paid on at least two occasions between 1947 and 1953 to travel home to Lincoln to visit her elderly mother. The distance from the city where she was (and still is) employed to Lincoln is 700 miles.

In responding to the questions of the life history form Connie did not acknowledge any marriage prior to age 45. She has no children. Her husband is unemployed ("has been for several years") because of injuries sustained in his work. He receives "disability social security." Connie who is now 58 years of age (1965) continues her work with the same company where she has been for 30 years. She and her husband

live "pretty comfortable but not fancy" in a house which they own and which has been their home for 10 years.

Connie sums up her main satisfactions in the statements: "I like church going and being in Urban League. I enjoy working on church programs and the playing and singing I do on spiritual songs. I like honest work even if it isn't my choice. I like to earn money and pay my way through life."

On the question of what influences had played the greatest role in determining the course of her life, Connie gave the main credit to her mother's emphasis upon "always make an honest living." She attributes to her mother and "some good friends" the idea that as an adult a person can have "his own influence on himself; spiritual guidance has done very well for myself." She credits her mother and "the kind of schooling I had" for giving her the employment qualifications that have served her so well for nearly 45 years--qualifications that are essentially personal attributes (rather than skills per se).

Betty M. (65) 1906

Betty was the oldest of three children born into the family of an economically hard pressed, relatively unskilled man whose principal job was that of a plumber. Now (as of the 1963 interview) Betty looks back upon her childhood as a time when, "There wasn't much money and we all had to get along without many things." She notes, however, that the family which included an older brother and younger sister did live in the same home (at the same address) until she was married and, "This was one thing that made us happy together." Betty managed to remain in school through two grades beyond the "Opportunity Room." The work in these grades--according to the person who was at the time the

Superintendent of Schools--consisted of a modified 9th and 10th grade program.

At 18 Betty secured regular employment as a clerk in a department store. Two years later she qualified as a "hair dresser" in a beauty parlor. This job she held for nearly twenty years. One of the rewards of this kind of work was the awareness of the importance of good appearance that it developed in Betty. Like at least five other females of the low ability group, Betty seems to have benefitted from her attention to personal appearance in her achievement of an advantageous marriage.

At 21 years of age Betty married a man who, although he was only four years older, had acquired a fair degree of capability in business management. After he had worked for several mercantile firms during the later '30's and through the 1940's, he and Betty took over the management of a restaurant which they have continued to operate to the date of this writing.

Betty and her husband have since their marriage lived in only three or four homes; their residence has been relatively stable. The homes, as seen by the interviewers, were "well kept, modestly but comfortably furnished and in 'good' parts of the city." Betty and her husband have had no children.

Questions about important influences in her life have elicited scant information from Betty. The reference to a happy childhood would perhaps imply good relationships with her parents. Obviously, as already indicated, she was the beneficiary of useful lessons in personal care while she was employed as a beautician. Her answer to the question, "In your life who have been the most important persons?" received an emphatic two word answer, "My husband!" She professes to have few avocational

interests other than occasional attendance at church. There is the implication that the operation of the restaurant allows only very limited opportunity for other activity.

Relatively Unsuccessful Low Ability Females

Pearl D. (60) 1907

When Pearl secured her first part-time job at age 16 she dropped out of school and also separated almost completely from her parents and her five siblings--two brothers and three sisters. Her father was a frequently unemployed plasterer. Pearl found part-time work as a maid in various homes. No employment lasted long--never more than two or three months. The result was that she became for several years a sort of perpetual itinerant "helper" going from one housecleaning job or dishwashing job to another (some hotel experience included). This was her roving existence until age 20 when she married. The person she married was also one of the subjects (low mental ability) of the present study.

When Pearl was contacted in 1935 (age 32) she had been married eight years and had five children. The dwelling in which she, her husband, and the five children lived consisted of two exceedingly filthy rooms with dirt floors. The family was on relief. Pearl's husband was able to secure only part-time employment at a low rate of pay. He worked at that time for an automobile parts firm and his job was to dismantle salvagable parts of wrecked vehicles. This was his kind of employment as long as he lived. He died of lung cancer at age 45 (in 1953).

After the death of her first husband Pearl remarried and was soon a widow again. Her second husband died of a heart attack in 1959.

When she was interviewed in 1961 and in 1963 she was living in a two-room, very dirty apartment located behind a small grocery store. She had one of her children living with her, a mentally retarded son. Pearl had had six children born of the two marriages. (Court records indicate considerable sexual promiscuity dating before Pearl's first marriage and continuance of this pattern throughout much of her life.)

When she was seen in 1963, Pearl was desperately trying to "get on welfare." She had very limited earnings "from sewing that people bring in for me to do and from things I make with my sewing and sell at the church." She had some three years previously become a member of a church and intimated in the interview that "some women in the Church Circle" helped her get to meetings of the Circle and to secure different kinds of sewing jobs. During the latest of the interviews Pearl complained of being anemic and of having an injured back. She quite obviously was living at a bare level of subsistence. There was evidence that welfare agencies, which had throughout her life provided various kinds of help, were in touch with her situation and prepared to supply at least limited relief.

The entries on the Life History Questionnaire for Pearl spell out more than 50 years of buffeted experience where there appears to have been few if any constructive forces with which she could identify. She left school with no truly saleable abilities and was described by those who knew her before she left school as "dirty," "unfriendly" (friendless?), "a girl who hated her parents," and "sort of shiftless." In none of the interviews with her from 1935 to 1961 did she ever name any person who strongly and beneficially influenced her life. In the 1963 interview she mentioned the helpfulness of certain "women I know

in the Church Circle." Responses to the Life History Questionnaire (1963) included numerous such statements as: "No one was every important in my life." "They didn't like me." (Employers with virtually no exception released her after only very brief periods of work.) "School I didn't like. I liked one teacher, just some." "I never talked with my parents about anything--especially life work." "I wish school had taught me sewing which is the thing I like."

Leah F. (64) 1910

At the age of 17 Leah went to work "at odd jobs." She seems not to have possessed any abilities that were marketable even at the time of good employment opportunities (the late '20's). She was one of five children whose father held a steady job as an assistant foreman for a milling company (flour mill).

Leah married in 1933 at the age of 23. Soon she and her husband were enveloped in the economic depression of the '30's. The files of welfare agencies show numerous entries for Leah, her husband, and their one child during the years from 1935 to 1939. Leah had during her teens held several jobs as a waitress in restaurants; she returned to this kind of employment after her marriage. "At first," to use her own expression, "I bounced around from jobs as a waitress to work as a bar maid in taverns." From 1950 to the last contact with her in 1963 she had held a number of jobs as a restaurant cook. Her phrase, "Always on the go, but never away from this town," seems quite accurately to describe her livelihood and her orbit of activity. "This town" was a place of 90,000 population in California. Leah moved there in 1939.

Leah's child, a daughter, appears quite largely to have been raised by Leah's parents.

Leah's first husband was a truck driver who spent limited time at home. He and Leah were "finally" divorced in 1940 after a lively legal skirmish over the discovery that he had for a year or more been married to another woman. Leah remarried in 1958. The information about her second marriage and about what her husband does for a living is virtually nil. (Leah's sister supplied the life history data for the 1963 summary and professed to know practically nothing about Leah's second husband.)

Over the years Leah has become involved with the law in several different ways. She was known while she was a teenager as something of a troublemaker ("bordering on being a juvenile delinquent"). After marriage to her first husband she was charged on several occasions with "disturbing the peace." She and her first husband had trouble with their landlords for failing to pay rent.

As in the case of Pearl J., Leah apparently never found a person with whom she could develop a feeling of closeness. She expressed difficulty in recalling any person or any experience that in any memorable way favorably influenced her life. At mid-life her economic and psychological security, such as they are, seem largely to derive from her employment as a cook.

Amy Y. (66) 1908

Amy's life history is in a number of ways similar to that of the other three relatively unsuccessful low ability females. Her childhood was replete with disadvantages and discouragements. Her father was capable only of very unskilled jobs and needed considerable welfare assistance to help provide for his wife and seven children. When Amy was five years of age her father abandoned the family and never returned to them. Six years later her mother died and Amy "grew up" in the home of

an older sister.

The period of "growing up" in the sister's home was interrupted when Amy at age 15 ran away with a World War I veteran who was 40 years of age. After approximately two years she returned to her sister's home. The man with whom she left was killed in an automobile accident. Amy declared that she had "never married the man." Then followed approximately eight years of work at various jobs of short duration plus some housekeeping for an unmarried brother.

Prior to Amy's disappearance with the war veteran she had become involved with the police and the juvenile court authorities because of promiscuous sex relations and also because of a variety of "disturbances of the peace."

In 1936 Amy secured some unskilled work with a wallpaper and paint company. This employment was of a part-time nature but with relatively little interruption lasted more than a dozen years. Between 1950 and 1960 Amy had fairly consistent, part-time employment as a seamstress and "furniture finisher." At the time of the 1963 interview she was taking a course of training in a "beauty school."

At the age of 35 (1943) Amy married. Several entries in her life history refer to "moving with my husband where his work took him." Curiously, the information about going from place to place where her husband's work took him does not harmonize with the record of quite continuous residence in Lincoln for at least the past dozen years. It has been difficult for interviewers to secure from Amy or other persons more than minimal data concerning Amy's husband. Such evidence as has been gleaned would indicate that her husband has only irregular employment and mostly away from Lincoln. Amy has no children.

In answer to questions about who in her life had been for her an important person, Amy's consistent answer was, "no one." She credits the sister with whom she lived during her childhood as being the only individual she ever valued much. Amy professes to have no recreational interests; she does not attend church or participate in the activities of other community institutions or organizations; she has no interest in civic affairs ("I leave voting to my husband"); and she has few favorable recollections of her six years of school. She believes that never to have attended school would "have been okay."

Eileen A. (62) 1906

Eileen's life history to a considerable degree reads like a composite of the majority of the relatively unsuccessful, non-institutionalized, low ability females. Certain phrases relating to Eileen underscore respectively some of the persisting themes in the lives of these women. The phrases are such as 1) born to parents of limited economic resources (Eileen's father was an often unemployed carpenter), 2) one of a family of eight children--six boys and two girls (three of the children died before Eileen was 25 years of age), 3) the mother died before Eileen was 18 years of age, 4) several appearances in police court prior to her 22nd birthday (the complaints usually included references to "entertainment of men" by Eileen and her sister plus "other disturbances of the Peace"), 5) first married at 15 (Her first husband had a record of numerous difficulties with the law; his health was poor; he died in 1931 soon after the couple was divorced), 6) married a second time at the age of 26 and only four months after the first husband's death, 7) divorced from the second husband three years after their marriage--on grounds of his extreme cruelty both to her and to her two children, one

by the first husband, 8) married (?) a third time at a date which Eileen seems vaguely to remember as "sometime between 1940 and 1945", and 9) maintained an almost unbroken record of welfare assistance (inclusive of child welfare) from the time of her first marriage to approximately 1949.

Eileen has made many attempts to secure and hold employment since first securing a job at age 14 as a "cleaning girl" with a dairy produce company. Information from interviews suggests that most of her employment has been part time and of short duration; much of it has involved housecleaning for other persons, dishwashing in restaurants, and similar unskilled kinds of work. She thus described the work which she had at the time of the latest interview (1963).

Over the years Eileen has had many "home" addresses. The interviewer in 1963 found her living in "a former cabin" at the edge of the city. The dwelling was being occupied by at least three families. The interviewer's statement reads, "The place was lived in by not fewer than nine persons and several dogs. There was a T.V. set and additional furniture of a very broken-down and smelly sort. Eileen was unkempt and quite dirty looking."

Eileen was never able to name a person who influenced her favorably in her work life, nor could she recall any incident in her work experience that left a happy memory. Her only response to questions about individuals who seemed important in her personal life was "my daddy--some, and my husband."

General Inferences from the Records of Eight Females

Four women were selected as fairly representative of the relatively successful females. Certain personal traits and conditions of life not

only appear with regularity in their histories but also in the histories of the larger sample of the comparatively successful females. For all four females an interviewer at some time or other (1935, 1950, or currently) commented with reference to these women on their "neat, personally quite attractive" appearance and also noted that their house-keeping was good. The relatively successful females (in quite marked contrast to the less successful ones) evidenced concern for their own personal appearance. These are traits that seem to have been developed early in life. Apparently, if a girl cannot be particularly bright being neat and attractive is a most helpful substitute. The more successful females all married well in the sense of finding mates who were steady workers and good family men.

Most of the relatively successful women (referring to all in this group and not just the few mentioned in the portraits) volunteered favorable recollections of individual persons who gave them encouragement and especially the kind of encouragement that instills a sense of personal pride. Such favorable comments were almost entirely absent from the records of the less successful females.

The element of reinforcement in a work situation (e.g., praise from an employer, enjoyment in their duties) is quite regularly to be found with the more successful individuals and quite consistently absent from the history of the less successful females. The relatively successful females were able to recall without difficulty persons and incidents contributory to a sense of self significance.

Of the four females who were categorized as "unsuccessful" two had remained dependent and homebound most of their life. The phrase "stays home and helps with the housework" was a common description in the

records of the majority of the less successful females as a group.

There seemed to be generally among the less successful females during their early life a strong attachment to the mother. To what extent this dependent status was necessitated by inadequacy and to what extent encouragement of dependence compounded existing inadequacy is something the life histories do not divulge. Perhaps it is a reasonable hypothesis that there is in this circumstance considerable interaction and that excessive protection of children of low ability encourages life long inadequacy.

Chapter 7

INTERPRETATIONS OF THE RESEARCH

In this chapter an attempt will be made to draw from the findings of the study some principal interpretations and to try to determine the theoretical import that they have. An over-arching purpose of the research was to get beyond the tabulations of data that tell how the several population samples fared and to observe whether any factors tended to be consistently and importantly related to change. Some generalized statements about the findings will precede the effort to identify significantly related, possibly contributory, factors.

Impressions Regarding Social and Intellectual Status

Examination of the present and recent social status of the three population samples which were studied leads to two general observations. The first is that the main findings of the earlier studies on the Low Group were confirmed and supported. The members of this group fared vastly better than anyone ever expected. Therefore, in any group of children identified as retarded there is likely to be much potential for development up to a relatively good level.

The second observation is that the Middle (original "dull") and High (original "control") Groups changed in an upward direction. As is nearly always true in adjoining groups on an intelligence distribution, there was considerable behavioral overlap. Certain subjects in each group were doing better, some poorer, than a percentage of those in each of the other two groups. But in most of the ratings of adjustment, the three groups were ranged in stairstep fashion.

In the area of general intelligence the findings were comparable to those related to social adjustment. The Low Group maintained and increased somewhat the generally good ability level found in 1950. Findings based on more limited data (more limited than for the Low Group) showed improvement in the ability level of the Middle Group and considerable stability in the High Group.

Range of capability for all groups was considerably greater than had been the case during the school years. Probably no more valid inference about a population sample of mentally retarded children could be made than was reported in an earlier study: "The great variation in the present abilities and achievements of the subjects should dispel any notion that persons who give evidence of low ability in childhood develop and perform according to a rigid stereotype. . . Psychologists, educators and parents may gain encouragement in the knowledge that many children whose test scores and academic performance suggest mental deficiency develop into self-sufficient and desirable citizens as adults." (Charles, 1953, p. 67)

Bases for Theoretical Speculations

As stated in the first paragraph of this chapter the writers have had the hope that insights of a relatively penetrating nature might be gained from this study--insights into factors and combinations of factors related to change. These kinds of understandings would be expected to derive only partially from the objective evidence reported in earlier chapters. They have developed more from the authors' personal acquaintance with the subjects over periods ranging from a few years to more than thirty years on the part of the senior author.

The observations concern two aspects of life: the development of skills or competence needed in getting along in society and the development of an adequate and positive self-concept.

In discussing the plight of handicapped persons, Lee Meyerson concerns himself with "psychological newness"; that is, newness arising from situations which have never been encountered before or in which the person lacks a culturally required "tool" for behavior. It is Meyerson's thesis that newness and tool deficiency makes it very difficult for the handicapped person to structure a new situation. This lack of structure leads to inappropriate, maladaptive, and inadequate behavior. Meyerson is concerned primarily with the physically handicapped, but the principle applies equally well to the mentally retarded. (Meyerson, 1963)

Obviously, whatever can be done by way of reducing newness and helping the retarded to acquire "tools" will result in improved life performance.

Meyerson suggests some actions designed to reduce psychological newness and improve structuring of new situations:

- a) Some new situations can be avoided.
- b) Specific skills to reduce newness can be taught.
- c) Some frustration tolerance can be taught.
- d) The potency of some goals can be reduced.
- e) Specific social skills can be taught to facilitate acceptance of the disabled (retarded) as persons.

(Meyerson, 1963)

Striving for Acceptable Self-Image

Closely related to the problem of development of competence is the matter of self-concept. The current study, like most, has necessarily concerned itself with the observable, external features of subjects'

lives. But this concern with the reportable facts should not obscure the vital part played in adjustment by the person's image of himself. The person of poor abilities (often in addition, of low social and economic status) has as great a need to see himself as a valued person, to "be somebody," as does the rich, the bright, the well born. This need was expressed dramatically by a convicted mass murderer, a young man of low abilities, unprepossessing physical attributes, and deprived family and social background (he was not a subject of the present study):

. . . And I got fed up bein' everybody's nobody. . . bein' irresponsible. . . that's what they was sayin'. . . Well I got responsible didn't I? Can't anybody be a man if he pays for it? I was payin' plenty for bein' a nobody. . . Now I said to myself, I guess it's time to be responsible, time to get mixed in somethin'. (Reinhardt, p. 104)

Society's Responsibility Regarding the Retarded Person With Complex Experiences of Adjustment

The suggestions which follow are generally applicable to all retarded children. Consideration of the lives of the subjects of the current study suggests three areas in which assistance may be profitable: 1) early and continued socialization and acculturation, 2) schooling, and 3) assistance with vocational choice and adjustment.

Socialization and Acculturation

All children require socialization. That is, they must learn the skills and ways of their particular culture. Acculturation refers to the modification of culture traits by contact with peoples having a different way of life. Since so many persons of limited ability come

from lower class families, they not only need to learn the ways of society but to modify many of the ways they learn at home or wherever they grow up. These needs were especially apparent in the Low Group of this study.

A distressing large number of low ability subjects reported that as children "nobody" helped them with their dress, their health, or their personal appearance. They could turn to "nobody" for advice or for help in general.

A statement made earlier might be repeated here: the "most successful" females were observed by researchers over 30 years to be neat, clean, and attractive. It is not clear in all instances who helped these women as girls to learn the arts of grooming, but it has been rewarding for them.

For both sexes it appears that the relatively successful have more middle class attributes of dress, speech, personal habits and the like, than those of poorer adjustment. Of course, cause and effect is obscured here, but early acquisition of middle class values and ways would seem to be highly desirable for retarded children.

Schooling

It is obvious that formal education of an appropriate nature is near the top of the list of needs of the mentally retarded. The school experience most profitable for the retarded has been a matter for study and has been debated for decades. The arguments cannot be settled here.

It seems to the writers, however, that the word "opportunity" in the name of the school which the subjects of the present study attended early in life has special significance. The school is a bridge between home (or institution for some) and the world these persons must be able

to adjust to. Whatever its specific design that "bridge" must be long enough and high enough to deliver such persons to the adult world in such a fashion that they can cope with what they meet. In view of the diversity of their personal characteristics and early experiences, it would not seem unreasonable to look for many "bridges" meeting optimally the needs of many individuals.

Vocational Assistance

Accompanying "general education" must be assistance in learning appropriate vocational skills, in finding a job, and in continuing to develop vocationally. Perhaps no other single factor is more important in life adjustment and success in our adult society than this.

Examination of the lives of the best adjusted Low Group subjects of both sexes (and in some cases husbands of the best adjusted female subjects) revealed that they either 1) joined big, paternalistic organizations early (e.g., a railroad) and stayed with it, usually in the same job or one quite similar, or 2) learned a single skill early and continued without a change or break. Such skills included barbering, truck-driving, and cooking.

The least successful subjects in adjustment on the other hand had drifted from job to job, usually worked for one person or a small firm rather than for large, well established, and continuing organizations. Almost none had a single, readily identifiable vocational skill. The implication of these differences surely invites serious consideration by vocational counselors and trainers.

Another striking difference between the more successful and less successful subjects was geographic mobility. The difference is mentioned here because of its relevance to job success and to adjustment in general.

The more successful subjects tended to "stay put" in either the home community or a community to which they moved in early life; the least successful subjects tended to be drifters and were frequently on the move. Of course, vocational and community stability are related and both reflect personality and emotional factors. But to whatever extent possible the vocational worker should help such persons to secure work in a relatively highly structured, stable, and continuing job--employment not involving much movement and change. Since a major characteristic of low ability is difficulty in coping with the new and unfamiliar, it would make good psychological sense to thus reduce the necessity for sizeable and/or continuous adjustment.

These generalizations are, perforce, based on the past performances of persons born before World War I. The rate of cultural change is accelerating sharply and stability of any kind will be harder to achieve as time goes by. Ability to adapt to change will be increasingly important to individual "survival" and success. Vocational workers and counselors will need to balance the evidence of conditions of past success against estimates of future cultural change. One might speculate that even after early training and preparation persons of low intelligence will need periodic rehabilitation, literally. "Stability" would be not a lifetime characteristic, at least vocationally, but a terminal one to be renewed through a period of retraining. Change of location might also be a necessity; witness the current community and area depressions where an industry has been outmoded or where a business has closed or moved away.

Development of Self-Concept

One of the more rewarding aspects of a study such as this one is

the opportunity, as described in another context by Mary Cover Jones, to "know the data as persons." (Jones, 1964) It is also one of the more difficult tasks to communicate this "knowing." In the preceding chapter an attempt was made to impart some "knowing" of subjects of the study by means of word portraits. But from person-to-person contacts which the investigators have had with the subjects have come strong impressions difficult to translate into objective analysis, dependent as they are on nuances of language, manner, and emotion. One of these "strong impressions" is of the fundamental importance of an adequate self-concept--the importance, as described earlier of "being somebody."

How does one convince himself that he is "somebody" instead of "nobody"? This aspect of personality cannot be explored in depth here with all its connotations. However, three factors influencing the self-concept have been inferred from subjective evaluations of the persons included in this research. They are 1) early experience, 2) the influence of significant persons, and 3) vocational experience.

Negative effects of early cognitive and sensory deprivation are generally agreed on. There is no question but that many of these subjects as preschool children lived in circumstances that could only be described as culturally and intellectually impoverished. It would seem self evident that the affectional and cognitive deprivation of the early lives of the subjects could not lead to the development of a very positive self-concept.

Society has concerned itself in recent years with the affectional needs of institutionalized infants and children but has not been able to do much for children living with their own families. Earlier stimulation of the intellect of deprived children, however, is a matter that is

receiving considerable attention in many of the nation's cities. Hopefully the experiences of such programs will enhance the development of adequate self-concepts in children. Confirmations of such results via well designed research would appear to be highly desirable.

Significant Persons

Every individual needs some other person as model, guide, and support at each stage of life, but this need is especially great in childhood and adolescence. A person cannot seem significant to himself when he is significant to no one else. Parents of the subjects of this study were often quite inadequate or in some cases non-existent. Unfortunately teachers sometimes seem to be threatening or too distant from a lower class child to meet his needs for significance. Such a child is fortunate indeed when he finds an appropriate adult to use as model and support.

Many of the subjects of the present research reported the rewarding experience of finding such a person. Sometimes (but not often enough) it was a teacher--a teacher who "made me want to be my best, to do the right thing. . .to become something." Sometimes it was an employer during adolescence who guided and led and helped the youngster to a feeling of adequacy. Not infrequently it was an older relative or a neighbor who filled the need.

Who this significant person happened to be was not nearly so important as the fact that there was someone. Success or failure in living adequate lives appeared among the subjects to be closely linked in a high percentage of cases to the presence or absence of a "significant person." The schools and society in general would seem to have a responsibility

for helping to expose children to a variety of persons who qualify as appropriate.

Vocation

When we meet a stranger in our society we are likely very early in our acquaintance to ask, "What do you do?" or "What business are you in?" From the reply we estimate education, social class, income, and a host of other qualities. In childhood and adolescence a frequent question is, "What are you going to be?" asked in an attempt to forecast future status.

The adolescent or adult of limited ability and background has at least as much, if not more, need for a ready and "respectable" answer to the question of occupation as does the normal or bright. Anyone who lived through the Depression of the 1930's (or who has studied the period) can recognize the damage to self esteem and sense of personal adequacy caused by joblessness in the competent. The less competent are no different in their reactions and needs. Society, through government, is taking greater cognizance of the problem of vocational adequacy. Those who work with the retarded need to recognize the importance of vocational competence to personality as well as to economic self sufficiency.

Ability and Performance

The tests given subjects at school age were not wholly accurate predictors of individual achievement or success, especially for the Low Group. It is certainly no news to hear again that intelligence tests are not entirely reliable predictors of individual behavior, but some school and rehabilitation workers still seem not to have heard the message.

Error in ability measures on the subjects--especially Low Group--of this study could have stemmed in part from cultural and language influences; there remains the possibility that some individuals develop intellectually slowly over a long period of time. It should be remembered also that some persons got along quite well in society despite continued poor ability.

New and better tests might be one answer, but little improvement has occurred in testing and prediction since these subjects were children. It would seem reasonable to infer from the evidence of this study that:

- 1) Especially with persons of low ability, intelligence test scores should be regarded as quite tentative.
- 2) Periodic re-evaluations beyond childhood would seem necessary whenever the person is involved in an advising, training, or placement situation.
- 3) More "whole person" evaluations must be made including cultural, motivational and personality characteristics. Some of the Low subjects of this study were rather obviously disturbed emotionally and a few were physically malfunctioning. Psychotic, psychoneurotic, and physically inadequate states can lead to behavior resembling mental deficiency but which require quite different treatment.

Intellectual Improvement

The upward trend in ability of subjects was discussed in an earlier chapter, but additional comment might be made about the relationship of personality and intelligence.

In the Sontag, Baker and Nelson study mentioned in the earlier chapter (Sontag, Baker, and Nelson, 1958) a relationship was found

between personality characteristics and intellectual change. It would seem reasonable that the relationship was due to other than chance factors.

From long term study of the subjects of this study the writers hypothesize that enhancement of self-concept and personality could be related to improvement of general intellectual functioning. Perhaps "freeing of intellect" would be a better term.

Whether improved self-concept is related to intellectual change per se, it is certainly a factor in general adequacy and life adjustment.

Chapter 8

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

The purpose of this study as stated at the beginning of this report was 1) to locate the subjects of mentally retarded, dull, and comparison groups first studied in early life in the middle and late 1930's, 2) to study the present status and functioning of these persons, and 3) to search for the principal causes of varying levels of life adjustment in persons of below average intelligence and to attempt to articulate the findings with certain generalized conceptualizations regarding life adjustment influences.

Subjects

Three different subject groups, all in their middle 50's, were studied:

The "Low Group." These were originally 206 persons identified as mentally deficient in 1935 on psychometric (I.Q. below 70) and behavioral grounds. A study of their social and intellectual status had been made in 1950 followed by another study of social status in 1961.

The "Middle Group." These subjects were originally 206 persons described as "dull" (I. Q. 70-80) in 1937 and matched with the above group.

The "High Group." This group was originally selected as an "average" population in 1935 and used as a control group for the study of the "Low Group."

Procedure

Subjects of all three groups were sought out and their present

social status was evaluated. Some subjects from each group were given intelligence tests. All subjects available (that is, living in the area and willing to cooperate) were interviewed or filled out life history blanks.

Social status of each group was reported in tabular form and comparisons were made between groups. Test scores were reported and ability estimates were made on the Low Group from accumulated evidence. Life history and interview data were presented for each group separately and compared. Some "most successful" and "least successful" males and females were selected out of the Low Group, and all available evidence was examined for clues to good and poor adjustment. Special reports (word portraits) were made on these individuals from the Low Group.

Findings of the Study

Social Status

Location. More than 65 per cent of Low Group subjects had remained in or returned to the home community probably thereby easing or avoiding some adjustment problems. About 40 per cent of the other two groups had remained.

Institutionalization. Very few subjects from either of the lower groups were institutionalized (only 9 out of 247; none of these was a recent institutionalization) and none out of the High Group.

Mortality. Both Middle and High Groups had low death rates. The Low Group had a very high rate--nearly a third of "located" subjects were deceased. Death rate, especially accidental death, had been lower since the 1950 study than earlier.

Marital Status. Divorce rate was from two to ten times national average in the two lower groups. Per cent of Middle and High Group

subjects married and living with spouses compared favorably with national average, but Low Group subjects had less success in getting and keeping mates and were consequently more likely to be living alone.

Economic Status. Although unemployment and dependence on public support was somewhat higher for Low Group subjects than national average, they had shown steady improvement in self support over the years. In 1935 only 27 per cent were found to be fully self supporting and 57 per cent more partially self supporting. By 1950 the figures on complete self support had risen to 36 per cent. By the time of the current study self support had risen to 67 per cent with another 16 per cent needing only some relief help to get along. Nearly 80 per cent of the group was described as usually employed, and half had been continuously employed at the same job for some years. Most jobs were in the labor and service category, but there were some in the higher occupational ranks.

Middle and High Group subjects were almost all self supporting. Jobs of Middle Group resembled those of Low Group while High Group subjects had a much greater proportion of professional and business level jobs with few labor and service listings.

Law Conformity. All three groups were generally law abiding. Less than 10 per cent of the two lower groups had convictions on civil offenses and most of these were rather typically lower class (e.g., drunk and disorderly) than vicious or truly anti-social. High Group subjects had no convictions.

Social and Recreational Activity. As anticipated membership and active participation in community activities reflected class, education, and intelligence. "Zero membership" in community clubs and the like ranged in stairstep fashion from High to Low Groups: 23 per cent, 48 per

cent, 60 per cent. Participation in these activities reversed that order: Low Group, 4 per cent; Middle Group, 17 per cent; High Group, 33 per cent. It was noted, however, that even in the Low Group 40 per cent belonged to some organizations and a few spent some time in club or social organization activity.

Ability and Performance

Low Group. These subjects originally (1935) averaged about 60 I.Q. Upon being retested with the Wechsler Bellevue in 1950 a sample averaged near 80 I.Q. The total group was categorized on test scores and performance: 20 per cent clearly defective, 10 per cent testing low but managing to get along in society, 65 per cent dull normal or average, and about 5 per cent physically handicapped.

A sample was retested for the present study. The sample maintained its 1950 status with slight but nonsignificant gains in scores. On the basis of recorded data and personal acquaintance with subjects' lives a "clinical-social" evaluation was made of all subjects with these results:

- a. Permanently retarded: 14 per cent
- b. Low test scores but "getting along" in society: 14 per cent
- c. Below average or borderline (A.A.M.D. -1 level): 46 per cent
- d. Average or better: 24 per cent
- e. Victim of circumstances (multiple handicaps): 2 per cent

Middle Group. A small sample of this group (18) was retested showing a mean rise from 80 I.Q. in 1935 to 88 I.Q. in the current study. Because both were group tests and the sample retested was so small, there seemed little reason to doubt the accuracy of the original description of "dull" (-1 A.A.M.D. level). Insufficient evidence on

lives was available to make clinical evaluations of ability as was done in the Low Group.

High Group. This originally was supposed to be an average "control" population. Mean I.Q. of 107 was secured on these subjects in the 1920's and again in the current study on a small sample (18 cases). General social performance of the total group suggested that the test sample may have been of lower ability than the true mean of the group. However, the test evidence available gives no grounds for doubting the "average" appellation.

Life History. Life history information was secured for subjects of each of the three groups through paper-and-pencil questionnaires or interviews. Life experiences were described for each group and between group comparisons were made.

Desirable experiences ranged downward in the three groups in stair-step fashion with the Low Group on the bottom. The subjects of this group suffered in comparison with both of the two higher groups on such experiences as having had health and appearance instruction, having a source of advice in general, likelihood of growing up with own parents, having mother at home, going to Sunday School, having had parents interested in life work, amount of education and vocational instruction, and the like. The bleakness of the early experiences of this group suggested the term "culturally deprived."

Some useful, "pin-pointed" evidences were derived from the relatively intensive study of the small samples of "most successful" and "least successful" Low Group subjects. Successful as compared to unsuccessful males were likely to have acquired a skill early and worked at it continuously, probably with a large paternalistic employer like a

railroad rather than trying a variety of occupations. They were likely to have stayed in one community rather than drifted about. Successful females were likely to have learned principles of good grooming and health care early, to have married well, and to be working steadily. Unsuccessful females generally had learned habits of dependence and attachment to mother and home.

Recommendations

Since this has been a general study rather than an assessment of particular techniques or operations no specific recommendations for action can be made beyond those presented in the "Implications" section. However, certain research needs have become apparent from both the achievements and failures of this study.

One important question needs consideration: Should researchers be encouraged to undertake more longitudinal studies of the deficient? The English psychologist Tizard says, "The Baller-Charles study and similar investigations carried out of the after-careers of institutional defectives make further purely descriptive studies of little general interestIt can indeed be said that half a century of investigation has done little more than correct the false ideas that have been put forward during the same period." (Tizard, 1958, p. 448) He goes on to suggest a number of psychological and social research approaches which seem promising to him. It does appear to the researchers involved in this study that replications of simple, descriptive longitudinal studies would probably not be very rewarding. What might then be profitable?

While the subjects of this study have been described and analyzed, the antecedents of much of their behavior are not clear. That is, what happened and what effect it had on their lives is known to a considerable

extent but not why it happened in many cases. This is, of course, a problem common to research in personality and adjustment.

What might be done? One profitable approach might be a longitudinal study of children identified early as mentally retarded, or perhaps better, a population of children who seem likely to be retarded. Then very early intensive study could be made of family relations and other personal influences of the sort so rewarding in other contexts (for example, the Sontag, Baker and Nelson studies, 1958). Much could be gained that cannot be secured very well retrospectively as was attempted in this project. Such a study might then be continued with particular attention paid to school experiences, social relationships, and later to vocational advising, training, early experience and the like. Educational experiences of the retarded are fairly well documented, family relations somewhat less, and vocational influences seem to be even more neglected as a field of study.

Study of the present Low Group should be continued or, more accurately, repeated after a suitable period of time. How will they handle the rapid technological change threatening so many jobs these days? Their labor and service types of jobs are particularly subject to elimination. (The occupation of one subject, a "dishwasher," comes at once to mind.) Their age level will compound the problem of retraining or of finding new jobs. Most have no old age financial resources beyond social security; some do not have this. How many will again become public charges? As many as were in the Depression? A high percentage live alone. Who will care for them in the weakness or illness of old age? Such questions seem worthy of consideration. Further study of this well documented population seems desirable to aid in life planning with other low intelligence groups.

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APPENDICES

APPENDIX A

Explanation of "Opportunity Room"

Special rooms for slow learners were first given the name "Opportunity Room" during the school year 1916-1917. Approximately a half dozen children comprised the first Opportunity Room group. They were children whose achievement level in the first two or three grades was markedly below that of the class and suggested mental retardation. A school psychologist had been employed by the Lincoln Schools and upon her concurrence with the opinion of a teacher that a particular child could benefit from the individualized attention which was to characterize the Opportunity Room, the child was enrolled therein.

The number of children in an Opportunity Room was never large; after the initial year the enrollment in the first school grew to approximately a dozen. Other similar schools were developed during the ensuing fifteen years. Pupils were grouped by age as well as for their kinds of special disability. Some proved to be quite largely--if not entirely--the victims of non-English speaking home backgrounds. When their facility with English permitted, they were returned to regular classes. Comparable circumstances resulted in other returns to regular class work.

For some children, however, regular class work remained altogether too difficult throughout their school-age years. Where this proved to be the case and the indications of low mental ability persisted, the youngster continued in the Opportunity Room. This was the situation of the 206 "Low Group" subjects upon whom main attention is fixed in the present study.

APPENDIX B

School Psychologist Qualifications

The same person administered all the individual tests that were taken by the subjects of the "Low Group." This person possessed, by present-day standards, exceptionally good qualifications as a school psychologist-psychometrist. A major part of her training was received under supervision at the Vineland Training School.

APPENDIX C

Follow-Up Method Via Social Security Administration

In brief, the method employed to trace individuals with the help of the Social Security Administration involved supplying the name and certain vital statistics to the Social Security Office about each individual. Included with the material which was sent to the Social Security Office was a letter which the Office would mail to the individual explaining the desirability of his contacting the Lincoln Public Schools (a post office box number was given). In addition to the letter, a self-addressed, stamped envelope was enclosed.

When individuals (subjects of the research) responded to the communication from the Social Security Office and their letters were received in Lincoln, a direct contact by mail was established with them. If they expressed willingness to fill out a Life History Questionnaire, the form was then mailed to them, thus to complete gathering of information by means of this arrangement.

APPENDIX D

Life History Questionnaire--Long Form

LIFE HISTORY QUESTIONNAIRE

Name _____ Sex _____ Date _____

Date of birth _____ Occupation _____

This is not a test. It is a list of questions about experiences common to most people. Please look at each question, pick out the one answer which most nearly describes your experience, and circle that answer (some questions have special directions for you to follow). If you feel that you cannot answer a particular question or that you strongly object to answering a particular question put a NA (meaning "no answer") beside the number of that question and go on to the next one. If you need assistance ask the person administering the questionnaire.

Section I:

1. Approximately how large was the community in which you grew up?
 - a. a farm or country home
 - b. under 5,000 people
 - c. 5,000 to 50,000 people
 - d. 50,000 to 250,000 people
 - e. over 250,000 people
2. How many children were there all together in your family when you were growing up?
 - a. 1-2
 - b. 3-4
 - c. 5-6
 - d. 7 or more
3. How often did you and your brothers or sisters play together?
 - a. had no brothers or sisters
 - b. very often--every day
 - c. occasionally--when no one else was around
 - d. very seldom--less than once a week
 - e. never
4. The language your parents used most at home was
 - a. English
 - b. German
 - c. Russian
 - d. Some other language (please identify _____)

5. Your parents were
 - a. born in this country
 - b. born in some other country
 - c. one parent foreign born, one native born
6. How old was your mother when you were born?
 - a. 16-20
 - b. 21-25
 - c. 26-30
 - d. 31-35
 - e. over 35
7. How old was your father when you were born?
 - a. 16-20
 - b. 21-25
 - c. 26-30
 - d. 31-35
 - e. over 35
8. Your father's occupation was
 - a. unskilled labor
 - b. semi-skilled labor
 - c. skilled labor
 - d. office worker
 - e. business man
 - f. professional man
9. Was your mother employed and away from home, at least part time, while you were growing up?
 - a. no
 - b. yes, she started working before I was 6 years old
 - c. yes, she started working when I was between 6 and 11 years of age
 - d. yes, she started working when I was between 12 and 18 years of age
 - e. yes, but she started working after I was 18 years of age
 - f. mother was dead or absent from home for some other reason
10. How far did your father go in school?
 - a. didn't complete 8th grade
 - b. finished the 8th grade but did not complete high school
 - c. graduated from high school
 - d. had some college work
 - e. graduated from college
11. Did your parents live together all the time you were growing up?
 - a. yes
 - b. no, because one died
 - c. no, because they both died
 - d. no, because they separated
 - e. no, because they were divorced

12. When you were growing up, you lived most of the time with
 - a. your parents
 - b. other relatives
 - c. in an institution
 - d. some other family
13. When you were growing up
 - a. you lived in the same area all the time
 - b. you moved once or twice to another part of the country
 - c. you moved around from one part of the country to another a great deal
14. Were your parents of the same religion when they were married?
 - a. yes
 - b. no
15. How much money did your family have while you were going to high school?
 - a. about the same as most of my classmates
 - b. more than most of my classmates
 - c. less than most of my classmates
 - d. don't know, or didn't pay much attention
16. Where did your spending money come from when you were in school?
 - a. allowance from family
 - b. your own earnings
 - c. partly allowance, partly earnings
 - d. had no spending money
17. The home you were raised in compared to your friends was
 - a. about the same
 - b. somewhat different
 - c. considerably different
18. When you were in school, how often did your parents or guardian appear to take an interest in how you were doing in your classes?
 - a. never
 - b. once in a great while
 - c. frequently
 - d. always
19. When your parents were bringing you up, were they
 - a. strict but fair
 - b. strict and unfair
 - c. not very strict
 - d. not much concerned with discipline
 - e. not very consistent about it

Section II:

1. On the subject of your life work, your parents
 - a. had strong feelings and outlined what they wanted you to do
 - b. were interested and helped you find out what you wanted to do
 - c. were interested, but did not understand what you wanted to do
 - d. actively opposed what you wanted to be
 - e. showed little or no interest
2. How old were you when you first held a paying job?
 - a. younger than 14
 - b. 14 to 16
 - c. 17 to 19
 - d. 20 to 22
 - e. over 22
3. Do you think that the period of your most efficient performance is
 - a. sometime in the past
 - b. about now
 - c. sometime in the future
 - d. doubt that there is a "peak period"
 - e. can't be sure
4. Where did you learn your job skills primarily?
 - a. in school vocational training program
 - b. from parents or relatives
 - c. on the job
 - d. in the military
 - e. somewhere else
5. When you were in school, how often was occupational information given in classes?
 - a. constantly
 - b. frequently
 - c. occasionally
 - d. seldom
 - e. never
6. When you were in school, how much part-time work did you do?
 - a. worked most of my hours out of school
 - b. worked regularly in out of school hours, but saved plenty of time for study and recreation
 - c. worked only occasionally in out of school hours
 - d. almost never worked during out of school hours
7. Place a mark in any and all spaces corresponding to the following types of work that you have done for pay. Mark as many items as are appropriate.
 - a. unskilled labor
 - b. semi-skilled labor
 - c. clerical or office work
 - d. sales clerk, door-to-door canvassing, etc.
 - e. personal service (housecleaning, maid, etc.)
 - f. policeman, fireman, etc.
 - g. camp counselor, YMCA or YWCA work

- h. social worker
- i. librarian
- j. factory or shop foreman, farm manager, etc.
- k. surveying, drafting, etc.
- l. farm worker, farmer or farm manager
- m. auto or real estate selling, etc.
- n. reporter, advertiser, receptionist, etc.
- o. semi-professional (pharmacist, photographer, etc.)
- p. research worker
- q. business man, assuming risk and management duties
- r. executive (large business or industry)
- s. none of the above

Section III:

1. To whom did you usually go for advice on important matters when you were about 16 years old?
 - a. friends your own age
 - b. your mother
 - c. your father
 - d. teachers or ministers
 - e. somebody else
 - f. didn't ask advice of anyone
2. As a child, did you attend church or Sunday School?
 - a. often
 - b. occasionally
 - c. never
3. What is your religion?

a. Catholic	d. other
b. Protestant	e. member of no particular church
c. Jewish	
4. Which one of these best describes the church attendance of your parents?
 - a. attended church every meeting if at all possible
 - b. occasionally let other activities take the place of church
 - c. attended church only once or twice a month
 - d. attended only on special occasions such as Christmas or Easter
 - e. they did not attend church

Section IV:

1. How often were you a leader of your "gang" activities up to the age of 12 years?
 - a. always
 - b. frequently
 - c. occasionally
 - d. seldom or never
 - e. wasn't a member of such a group, or can't remember

2. When you were in your teens, how old were most of your friends?
 - a. they were usually younger than you were
 - b. they were about your own age
 - c. they were usually older than you were
 - d. they were mostly adults
 - e. you did not have an opportunity to make friends (because of work, isolated area, etc.)
3. To what extent are you still friendly with people you knew in school?
 - a. not at all
 - b. friendly with a few of them, on rare occasions
 - c. friendly with some, but see them irregularly
 - d. see some regularly
 - e. close friends with quite a few
4. (Women only) Who helped you learn how to fix your hair attractively, choose the right clothes, use makeup, etc.?
 - a. mother or guardian
 - b. teacher
 - c. older sister
 - d. some woman outside the family
 - e. nobody helped me
5. To how many clubs or social organizations do you now belong? (Include any group which has 10 or more members, regular meetings and a definite membership)
 - a. 0
 - b. 1
 - c. 2 or 3
 - d. 4 to 6
 - e. 7 or more
6. To which one of the following activities have you devoted the most time in the past five years?
 - a. club activities (Elks, Kiwanis, fund-raising, etc.)
 - b. repairs around the house (painting, papering, carpentry, etc.)
 - c. hobbies (collecting stamps or coins, photography, etc.)
 - d. outside activities connected with your job
 - e. something else
7. You have traveled out of the state where you now live
 - a. very little
 - b. a moderate amount
 - c. a great deal

Section V:

1. What is your usual state of health?
 - a. never ill
 - b. never seriously ill
 - c. feel poorly from time to time
 - d. feel "under the weather" a good bit of the time

2. Up to the age of twelve years, approximately how often did you suffer minor illnesses?
 - a. much more than the average child
 - b. more often than the average child
 - c. less often than the average child
 - d. much less often than the average child
 - e. was never ill
3. Between the ages of twelve and twenty-one, approximately how often did you suffer minor illnesses?
 - a. much more often than the average person
 - b. more often than the average person
 - c. less often than the average person
 - d. much less than the average person
 - e. was never ill
4. Since you left school, how much time on the average have you lost from work because of illness?
 - a. almost none
 - b. two or three days a year
 - c. one or two weeks a year
 - d. more than two weeks a year
5. Have you ever suffered from (circle all that apply)
 - a. allergies
 - b. asthma
 - c. high blood pressure
 - d. ulcers
 - e. headaches
6. What have you done to try to keep healthy in the past year? (Circle all that apply)
 - a. visited my doctor regularly
 - b. got plenty of sleep and fresh air
 - c. didn't overeat
 - d. stopped worrying
 - e. didn't do anything in particular
7. Who taught you to look after your health and appearance? (Circle all that apply)
 - a. your parents
 - b. school teachers
 - c. someone in an institution where you lived
 - d. military
 - e. some other adults
8. How would you judge your health now?
 - a. very good--much better than other people's
 - b. quite good--somewhat above average
 - c. about average
 - d. somewhat poorer than average
 - e. very poor health--source of considerable concern

Section VI:

1. About how often do you spend an evening at home sitting around and reading?
 - a. practically never
 - b. rarely
 - c. occasionally
 - d. frequently
 - e. whenever I have a chance
2. On the average, how much time do you spend reading newspapers?
 - a. less than five minutes a day
 - b. 5 to 15 minutes a day
 - c. 15 to 30 minutes a day
 - d. more than 30 minutes a day
3. How many magazines do you read consistently?
 - a. 0
 - b. 1
 - c. 2 or 3
 - d. 4 to 6
 - e. 7 or more
4. How many serious, non-fiction books have you read in the past year?
 - a. 0
 - b. 1
 - c. 2-4
 - d. 5 to 8
 - e. 9 or more
5. Outside your job, what interests you the most?
 - a. athletics or sports
 - b. a constructive hobby
 - c. intellectual pursuits
 - d. puttering around your home and yard
 - e. none of the above
6. Indicate the extent to which you have participated in the following activities by marking each item according to the scale:
 1. very frequently
 2. frequently
 3. occasionally
 4. seldom
 5. never
 - a. active sports (fishing, skiing, etc.)
 - b. spectator sports (watching baseball, etc.)
 - c. loafing, watching TV, etc.
 - d. reading
 - e. club or lodge activities
 - f. maintenance or repairs of home
 - g. hobbies (model planes, stamps, etc.)
 - h. other

Section VII:

1. How many jobs did you have last year?
 - a. held one job steadily
 - b. changed jobs occasionally
 - c. changed jobs frequently
 - d. unemployed most of the time
 - e. have not worked for two years or more
2. What sort of work do you like? (Choose 3; a or b, c or d, e or f)
 - a. indoor work
 - b. outdoor work
 - c. physical work
 - d. mental work
 - e. work with people
 - f. work with things
3. What size group do you prefer to work with?
 - a. work alone
 - b. 5 or less
 - c. 5 to 10
 - d. 10 or more
4. In your work life, have you
 - a. worked at the same job without much change since you left school
 - b. changed jobs occasionally, but stayed in the same occupation
 - c. tried several different occupations
 - d. worked at one occupation most of the time, with occasional periods at some other activity.
5. What has been your most important reason for desiring to change any job you have held in the past?
 - a. to do more interesting work
 - b. to have more likeable associates
 - c. to increase your pay
 - d. to make better use of your training and experience
 - e. other

Section VIII:

1. How many years of formal schooling have you completed?
 - a. junior high school or less
 - b. some high school but did not graduate
 - c. graduated from high school
 - d. high school and some college
 - e. graduated from college or more
2. What size school did you attend?
 - a. fewer than 100
 - b. between 100 and 500
 - c. between 500 and 1,000
 - d. between 1,000 and 2,000
 - e. more than 2,000

3. How old were you when you completed the eighth grade?
 - a. under 10
 - b. 10 to 12
 - c. 13 or 14
 - d. 15 or over
 - e. didn't complete the eighth grade, don't know, etc.
4. As you grew up, how did you feel about school?
 - a. liked it very much
 - b. liked it most of the time
 - c. just accepted it as necessary
 - d. was often a little unhappy about it
 - e. really disliked it and was glad to get out
5. Which of these subjects did you consider most worthwhile for yourself?
 - a. machine shop or blueprint reading
 - b. applied mechanics
 - c. commercial or business subjects
 - d. sales, management or advertising
 - e. none of the above

Section IX:

1. You and your husband or wife are:
 - a. living together
 - b. living apart
 - c. legally separated
 - d. divorced
 - e. not married, or spouse is deceased
2. You have
 - a. one child
 - b. two children
 - c. three children
 - d. four children or more
 - e. no children, or you are not married
3. How many persons, other than yourself, are dependent on you for their support?
 - a. none
 - b. 1
 - c. 2 or 3
 - d. 4 or 5
 - e. more than 5
4. How old were you when you were married?
 - a. less than 18 years old
 - b. 18 - 20 years old
 - c. 21 - 25 years old
 - d. 26 - 30 years old
 - e. over 31 years old
 - f. am not married

5. How much education did your spouse have:
 - a. did not finish grammar school
 - b. finished grammar school but did not complete high school
 - c. completed high school
 - d. had some college work
 - e. completed college
 - f. am not married
6. On the average, how many hours per week did, or do you and your children do things together in your leisure time?
 - a. less than one hour
 - b. one to three hours
 - c. four to seven hours
 - d. more than seven hours
 - e. have no children
7. In what way will you probably do, or have you done, more for your children than your parents did for you?
 - a. give them a better standard of living (clothes, food, home)
 - b. give them more opportunity to study and go to school
 - c. give them more financial support to get established in a business or profession
 - d. give them more affection and consideration as individuals
 - e. none of these
8. Which of the following do you have in your home?
 - a. telephone
 - b. television
 - c. automatic washing machine
 - d. air conditioner
 - e. have no home
9. In the last ten years you have lived in
 - a. one home
 - b. several homes within one city
 - c. two cities
 - d. three to five cities
 - e. more than five cities
10. What living arrangements do you have?
 - a. own my own home
 - b. rent a house
 - c. rent a room or apartment
 - d. live with relatives
 - e. have some other arrangement
11. Why did you choose your occupation?
12. Who have been the most significant persons in your life?
13. What person (or persons) influenced you most in your choice of occupation?

APPENDIX E

Life History Questionnaire--Short Form

LIFE HISTORY QUESTIONNAIRE

Name _____ Sex _____ Date _____

Address _____ Occupation _____

1. What other cities have you lived in? What were the approximate dates?

2. a. Are you married? _____ yes _____ no

b. What is your husband's/wife's name? _____

c. Is he/she living? _____ yes _____ no

d. Have you ever been divorced? _____ yes _____ no

e. From whom? _____

3. a. Do you have any children? _____ yes _____ no

b. What are their names and addresses?

4. a. Do you have any grandchildren? _____ yes _____ no

b. What are their names and addresses?

5. a. What is your present occupation? _____

b. Where are you presently employed? _____

c. What other occupations have you had? _____

d. Where else have you been employed since 1950? _____

6. What is your husband's/wife's occupation? _____

7. Do you own the home you are presently living in? _____ yes _____ no

8. Have you had:

a. Any major illnesses that have impaired your ability to follow your occupation? _____ yes _____ no

If so, what were they? _____

b. Any accidents that have impaired your ability to follow your occupation? _____ yes _____ no

If so what were they? _____

9. What community service groups have you belonged to? (For example: church, PTA, Kiwanis, women's clubs, boyscouts, etc.) _____

What community service groups do you presently belong to?

(Interviewer underline those in part (a) presently belonged to)

10. a. What social groups have you belonged to? (For example: garden clubs, fraternal groups, neighborhood clubs, card clubs, etc.) _____

- b. Which social groups do you presently belong to? (Underline as in 9.) _____
11. a. What recreational pursuits have you had? (For example: hobbies, sports, games, etc.) _____

- b. Which do you take part in at present? (Underline as in 9 & 10.)
12. a. How do you feel that the public schools prepared you to make use of your leisure time? _____

- b. What should the public schools do to prepare persons for use of leisure time? _____

13. How do you feel that the public schools might have better prepared you for a successful life? _____

14. a. Provided that the information was kept in strictest confidence, would you be willing to attend a free dinner this fall at which a paper and pencil test was given? _____yes _____no
- b. What evening of the week would be most convenient for you?
_____least convenient?_____
15. Why did you choose your occupation?
16. Who have been the most significant persons in your life?
17. What person (or persons) influenced you most in your choice of occupation?.. _____

APPENDIX F

Tables 73-120

Tables from Life History Data
for Middle and High Mental Ability Groups

Table 73

PERSONS TO WHOM MIDDLE GROUP SUBJECTS WENT FOR ADVICE WHEN SIXTEEN YEARS OLD

Persons	Male		Female		Both	
	N	%	N	%	N	%
Friends own age	1	1.79	2	6.25	3	3.41
Mother	14	25.00	12	37.50	26	29.55
Father	22	39.28	4	12.50	26	29.55
Both parents	7	12.50	3	9.37	10	11.36
Teacher or minister	1	1.79	4	12.50	5	5.68
Someone else	1	1.79	5	15.63	6	6.82
Asked no advice	10	17.85	2	6.25	12	13.63
Total responses	56	100.00	32	100.00	88	100.00
No response	0		1		1	
Information not available	22		27		49	
Total N	78		60		138	

Table 7_b

PERSONS TEACHING KNOWLEDGE OF HEALTH AND APPEARANCE TO MIDDLE GROUP

Persons	Male		Female		Both	
	N	%	N	%	N	%
Mother	0	0.00	0	0.00	0	0.00
Father	0	0.00	0	0.00	0	0.00
Both parents	34	79.08	17	58.62	51	70.83
Older brothers and sisters	0	0.00	0	0.00	0	0.00
School teachers	2	4.65	2	6.90	4	5.56
Someone in institution where lived	1	2.33	1	3.45	2	2.78
Military	3	6.97	4	13.79	7	9.72
Some other adult	3	6.97	5	17.24	8	11.11
No one	0	0.00	0	0.00	0	0.00
Total responses	43	100.00	29	100.00	72	100.00
No response	6		2		8	
Information not available	29		29		58	
Total N	78		60		138	

Table 75

MOBILITY WHILE GROWING UP OF MIDDLE GROUP SURVIVORS

Response	Male		Female		Both	
	N	%	N	%	N	%
Lived in same area all time	48	67.61	37	66.07	85	66.93
Moved once or twice to another part of country	18	25.35	18	32.14	36	28.35
Moved great deal to various parts of country	5	7.04	1	1.79	6	4.72
Total responses	71	100.00	56	100.00	127	100.00
No response	0		0		0	
Information not available	7		4		11	
Total N	78		60		138	

Table 76

PLACE OF RESIDENCE WHILE GROWING UP - MIDDLE GROUP

Response	Male		Female		Both	
	N	%	N	%	N	%
Lived with parents	69	95.83	52	96.30	121	96.03
Lived with other relatives	2	2.78	1	1.85	3	2.38
Lived in an institution	1	1.39	1	1.85	2	1.59
Lived with some other family	0	0.00	0	0.00	0	0.00
Total responses	72	100.00	54	100.00	126	100.00
No response	0		0		0	
Information not available	6		6		12	
Total N	78		60		138	

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Table 77

ATTENDANCE AT CHURCH OR SUNDAY SCHOOL DURING CHILDHOOD - MIDDLE GROUP

Attendance	Male		Female		Both	
	N	%	N	%	N	%
Often	30	61.22	25	83.34	55	69.62
Occasionally	16	32.65	4	13.33	20	25.32
Never	3	6.13	1	3.33	4	5.06
Total responses	49	100.00	30	100.00	79	100.00
No response	0		0		0	
Information not available	29		30		59	
Total N	78		60		138	

Table 78

PATTERN OF FRIENDSHIPS WHILE IN SCHOOL - MIDDLE GROUP

Type of Pattern	Male		Female		Both	
	N	%	N	%	N	%
No friendships at all	10	20.83	6	22.22	16	21.33
Friendly with few, on rare occasions	17	35.42	7	25.94	24	32.00
Friendly with some, but seen irregularly	14	29.17	12	44.44	26	34.67
See some regularly	4	8.33	1	3.70	5	6.67
Close friends with quite a few	3	6.25	1	3.70	4	5.33
Total responses	48	100.00	27	100.00	75	100.00
No response	1		2		3	
Information not available	29		31		60	
Total N	78		60		138	

Table 79

EMPLOYMENT OF MOTHER OF MIDDLE GROUP SUBJECTS ACCORDING TO AGE OF SUBJECT

Response	Male		Female		Both	
	N	%	N	%	N	%
Not employed	40	81.63	20	66.67	60	75.95
Yes, before the subject was 6 years old	3	6.12	4	13.32	7	8.86
Yes, when the subject was 6 - 11 years old	3	6.12	2	6.67	5	6.33
Yes, started when subject was 12 - 18 years old	2	4.09	2	6.67	4	5.06
Yes, started after subject was 18 years old	1	2.04	0	0.00	1	1.27
Mother was dead or absent from home	0	0.00	2	6.67	2	2.53
Total responses	49	100.00	30	100.00	79	100.00
No response	0		0		0	
Information not available	29		30		59	
Total N	78		60		138	

Table 80

AGE AT TIME OF MARRIAGE OF MIDDLE GROUP SUBJECTS

Age	Male		Female		Both	
	N	%	N	%	N	%
Less than 18	1	1.79	10	25.00	11	11.46
18 - 20 years old	1	1.79	9	22.50	10	10.42
21 - 25 years old	33	58.93	11	27.50	44	45.83
26 - 30 years old	16	28.57	7	17.50	23	23.96
Over 31 years old	3	5.36	3	7.50	6	6.25
Not married	2	3.56	0	0.00	2	2.08
Total responses	56	100.00	40	100.00	96	100.00
No response	1		2		3	
Information not available	21		18		39	
Total N	78		60		138	

Table 81

PARENTS' FEELINGS ON SUBJECT OF LIFE WORK OF MIDDLE GROUP SUBJECTS

Response	Male		Female		Both	
	N	%	N	%	N	%
Had strong feelings and outlined their desires	2	4.55	2	7.41	4	5.63
Were interested and helped subject decide	22	50.00	12	44.44	34	47.89
Were interested but did not understand subject's desires	8	18.18	6	22.22	14	19.72
Actively opposed subject's choice	0	0.00	0	0.00	0	0.00
Showed little or no interest or response	12	27.27	7	25.93	19	26.76
Total responses	44	100.00	27	100.00	71	100.00
No response	5		0		5	
Information not available	29		33		62	
Total N	78		60		138	

Table 82

AGE OF MIDDLE GROUP SUBJECTS WHEN FIRST PAYING JOB WAS HELD

Age	Male		Female		Both	
	N	%	N	%	N	%
Younger than 11; years old	18	26.87	2	4.76	20	18.35
11 - 16 years old	25	37.31	22	52.38	47	43.12
17 - 19 years old	20	29.85	15	35.72	35	32.11
20 - 22 years old	3	4.48	1	2.38	4	3.67
Over 22 years old	1	1.49	2	4.76	3	2.75
Never worked	0	0.00	0	0.00	0	0.00
Total responses	67	100.00	42	100.00	109	100.00
No response	0		1		1	
Information not available	11		17		28	
Total N	78		60		138	

Table 83

PLACE JOB SKILLS WERE PRIMARILY LEARNED FOR MIDDLE GROUP

Response	Male		Female		Both	
	N	%	N	%	N	%
School vocational training program	3	6.25	6	22.22	9	12.00
From parents or relatives	1	2.08	2	7.41	3	4.00
On the job	41	85.42	19	70.37	60	80.00
In the military	0	0.00	0	0.00	0	0.00
Somewhere else	3	6.25	0	0.00	0	0.00
Total responses	48	100.00	27	100.00	75	100.00
No response	1		2		3	
Information not available	29		31		60	
Total N	78		60		138	

Table 84

TYPE OF WORK PREFERRED BY MIDDLE GROUP SUBJECTS

Type	Male		Female		Both	
	N	%	N	%	N	%
Indoor	22	46.81	13	61.90	35	51.47
Outdoor	25	53.19	7	33.33	32	47.06
No preference	0	0.00	1	4.77	1	1.47
Total responses	47	100.00	21	100.00	68	100.00
No response	1		7		8	
Information not available	30		32		62	
Total N	78		60		138	

Table 85

AMOUNT OF PART-TIME WORK WHILE IN SCHOOL OF MIDDLE GROUP SUBJECTS

Amount of time	Male		Female		Both	
	N	%	N	%	N	%
Worked most of hours out of school	14	30.43	7	26.92	21	29.17
Worked regularly in out of school hours but saved time for study and recreation	12	26.09	3	11.54	15	20.83
Worked only occasionally in out of school hours	15	32.61	8	30.77	23	31.94
Almost never worked	5	10.87	8	30.77	13	18.06
Total responses	46	100.00	26	100.00	72	100.00
No response	3		4		7	
Information not available	29		30		59	
Total N	78		60		138	

Table 86

TYPE OF WORK PREFERRED BY MIDDLE GROUP SUBJECTS
(PHYSICAL vs. MENTAL)

Type	Male		Female		Both	
	N	%	N	%	N	%
Physical	29	82.86	14	73.69	43	79.63
Mental	6	17.14	4	21.05	10	18.52
No preference	0	0.00	1	5.26	1	1.85
Total responses	35	100.00	19	100.00	54	100.00
No response	9		7		16	
Information not available	34		34		68	
Total N	78		60		138	

Table 87

TYPE OF WORK PREFERRED BY MIDDLE GROUP SUBJECTS
(WITH PERSONS vs. THINGS)

Type	Male		Female		Both	
	N	%	N	%	N	%
With people	23	58.97	16	57.14	39	58.21
With things	16	41.03	11	39.29	27	40.30
No preference	0	0.00	1	3.57	1	1.49
Total responses	39	100.00	28	100.00	67	100.00
No response	7		1		8	
Information not available	32		31		63	
Total N	78		60		138	

Table 88

FATHER'S OCCUPATION OF MIDDLE GROUP SUBJECTS

Occupation	Male		Female		Both	
	N	%	N	%	N	%
Unskilled labor	28	38.36	27	50.95	55	43.65
Semi-skilled labor	10	13.69	11	20.75	21	16.67
Skilled labor	24	32.86	11	20.75	35	27.78
Office worker	1	1.37	0	0.00	1	.79
Businessman	5	6.86	4	7.55	9	7.14
Professional man	5	6.86	0	0.00	5	3.97
Total responses	73	100.00	53	100.00	126	100.00
No response	1		1		2	
Information not available	4		6		10	
Total N	78		60		138	

Table 89

VARIABILITY IN LIFE WORK OF MIDDLE GROUP SUBJECTS

Degree of change	Male		Female		Both	
	N	%	N	%	N	%
Worked at same job without much change since leaving school	23	38.98	14	42.43	37	40.22
Changed jobs occasionally but remained in same occupation	12	20.34	5	15.15	17	18.48
Tried several different occupations	17	28.81	6	18.18	23	25.00
Worked at one occupation most of time with occasional periods at some other occupations	7	11.87	8	24.24	15	16.30
Total responses	59	100.00	33	100.00	92	100.00
No response	1		2		3	
Information not available	18		25		43	
Total N	78		60		138	

Table 90

YEARS OF FORMAL SCHOOLING COMPLETED BY MIDDLE GROUP SUBJECTS

Years	Male		Female		Both	
	N	%	N	%	N	%
Junior High School or less	31	40.26	26	44.07	57	41.91
Some high school but not graduated	24	31.17	13	22.03	37	27.21
Graduated from high school	12	15.58	15	25.42	27	19.85
High school and some college	7	9.09	5	8.48	12	8.82
Graduated from college or more	3	3.90	0	0.00	3	2.21
Total responses	77	100.00	59	100.00	136	100.00
No response	0		0		0	
Information not available	1		1		2	
Total N	78		60		138	

Table 91

FEELING ABOUT SCHOOL WHILE GROWING UP - MIDDLE GROUP SUBJECTS

Feelings	Male		Female		Both	
	N	%	N	%	N	%
Liked it	12	24.49	10	35.71	22	28.57
Liked it most of the time	14	28.57	13	46.44	27	35.06
Just accepted it as necessary	13	26.53	3	10.71	16	20.78
Often a little unhappy about it	4	8.16	0	0.00	4	5.19
Really disliked it and was happy to get out	6	12.25	2	7.14	8	10.40
Total responses	49	100.00	28	100.00	77	100.00
No response	0		2		2	
Information not available	29		30		59	
Total N	78		60		138	

Table 92

NUMBER OF PERSONS DEPENDENT FOR SUPPORT ON MIDDLE GROUP SUBJECTS

Number	Male		Female		Both	
	N	%	N	%	N	%
None	8	16.33	20	66.68	28	35.43
1	19	38.78	1	3.33	20	25.32
2 or 3	20	40.82	7	23.33	27	34.18
4 or 5	2	4.08	1	3.33	3	3.80
More than 5	0	0.00	1	3.33	1	1.27
Total responses	49	100.00	30	100.00	79	100.00
No response	0		0		0	
Information not available	29		30		59	
Total N	78		60		138	

Table 93

LEVEL OF EDUCATION OF SPOUSE OF MIDDLE GROUP SUBJECTS

Level	Male		Female		Both	
	N	%	N	%	N	%
Did not finish grammar school	0	0.00	2	6.45	2	2.56
Finished grammar school but not high school	18	38.30	11	35.48	29	37.18
Finished high school	18	38.30	13	41.93	31	39.74
Had some college work	7	14.89	1	3.23	8	10.26
Completed college	4	8.51	4	12.91	8	10.26
Total responses	47	100.00	31	100.00	78	100.00
No response	0		0		0	
Not married	2		0		2	
Information not available	29		29		58	
Total N	78		60		138	

Table 94

SELF-EVALUATION OF PERIOD OF MOST EFFICIENT PERFORMANCE OF MIDDLE GROUP

Time	Male		Female		Both	
	N	%	N	%	N	%
Sometime in past	11	23.40	5	17.86	16	21.33
About now	19	40.43	12	42.86	31	41.33
Sometime in future	6	12.77	3	10.71	9	12.00
Doubt there is "peak period"	2	4.25	3	10.71	5	6.67
Can't be sure	9	19.15	5	17.86	14	18.67
Total responses	47	100.00	28	100.00	75	100.00
No response	2		2		4	
Information not available	29		30		59	
Total N	78		60		138	

Table 95

AMOUNT OF OUT-OF-STATE TRAVEL OF MIDDLE GROUP SUBJECTS

Amount	Male		Female		Both	
	N	%	N	%	N	%
Very little	20	40.82	8	27.59	28	35.90
A moderate amount	15	30.61	14	48.28	29	37.18
A great deal	14	28.57	7	24.13	21	26.92
Total responses	49	100.00	29	100.00	78	100.00
No response	0		1		1	
Information not available	29		30		59	
Total N	78		60		138	

Table 96

MOBILITY IN LAST TEN YEARS OF MIDDLE GROUP SUBJECTS

Lived in	Male		Female		Both	
	N	%	N	%	N	%
One home	32	65.31	16	55.17	48	61.54
Several homes in one city	13	26.53	11	37.93	24	30.77
Two cities	3	6.12	2	6.90	5	6.41
Three to five cities	1	2.04	0	0.00	1	1.28
More than five cities	0	0.00	0	0.00	0	0.00
Total responses	49	100.00	29	100.00	78	100.00
No response	0		1		1	
Information not available	29		30		59	
Total N	78		60		138	

Table 97

PERSONS TEACHING KNOWLEDGE OF HEALTH AND APPEARANCE TO HIGH GROUP

Persons	Male		Female		Both	
	N	%	N	%	N	%
Mother	0	0.00	0	0.00	0	0.00
Father	0	0.00	0	0.00	0	0.00
Both parents	12	75.00	6	66.67	18	72.00
Older brothers and sisters	0	0.00	1	11.11	1	4.00
School teachers	1	6.25	0	0.00	1	4.00
Someone in institution where lived	0	0.00	0	0.00	0	0.00
Military	3	18.75	0	0.00	3	12.00
Some other adult	0	0.00	2	22.22	2	8.00
No one	0	0.00	0	0.00	0	0.00
Total responses	16	100.00	9	100.00	25	100.00
No response	2		2		4	
Information not available	0		0		0	
Total N	18		11		29	

Table 98

PERSONS TO WHOM HIGH GROUP SUBJECTS WENT FOR ADVICE WHEN SIXTEEN YEARS OLD

Persons	Male		Female		Both	
	N	%	N	%	N	%
Friends own age	2	12.50	1	11.11	3	12.00
Mother	3	18.75	6	66.67	9	36.00
Father	9	56.25	0	0.00	9	36.00
Both parents	0	0.00	0	0.00	0	0.00
Teacher or minister	0	0.00	0	0.00	0	0.00
Someone else	0	0.00	1	11.11	1	4.00
Asked no advice	2	12.50	1	11.11	3	12.00
Total responses	16	100.00	9	100.00	25	100.00
No response	2		2		4	
Information not available	0		0		0	
Total N	18		11		29	

Table 99

MOBILITY WHILE GROWING UP OF HIGH GROUP SURVIVORS

Response	Male		Female		Both	
	N	%	N	%	N	%
Lived in same area all the time	15	37.50	9	90.00	24	92.31
Moved once or twice to another part of country	1	6.25	1	10.00	2	7.69
Moved great deal to various parts of country	0	0.00	0	0.00	0	0.00
Total responses	16	100.00	10	100.00	26	100.00
No response	2		1		3	
Information not available	0		0		0	
Total N	18		11		29	

Table 100

PLACE OF RESIDENCE WHILE GROWING UP - HIGH GROUP

Response	Male		Female		Both	
	N	%	N	%	N	%
Lived with parents	17	99.99	10	90.91	27	100.00
Lived with other relatives	0	0.00	0	0.00	0	0.00
Lived in an institution	0	0.00	0	0.00	0	0.00
Lived with some other family	0	0.00	0	0.00	0	0.00
Total responses	17	100.00	10	100.00	27	100.00
No response	1		1		2	
Information not available	0		0		0	
Total N	18		11		29	

Table 101

ATTENDANCE AT CHURCH OR SUNDAY SCHOOL DURING CHILDHOOD - HIGH GROUP

Attendance	Male		Female		Both	
	N	%	N	%	N	%
Often	12	70.59	5	55.55	17	65.38
Occasionally	5	29.41	4	44.45	9	34.62
Never	0	0.00	0	0.00	0	0.00
Total responses	17	100.00	9	100.00	26	100.00
No response	1		2		3	
Information not available	0		0		0	
Total N	18		11		29	

Table 102

PATTERN OF FRIENDSHIPS WHILE IN SCHOOL - HIGH GROUP

Type of Pattern	Male		Female		Both	
	N	%	N	%	N	%
No friendships at all	1	6.25	2	22.22	3	12.00
Friendly with few, on rare occasions	2	12.50	2	22.22	4	16.00
Friendly with some, but seen irregularly	7	43.75	4	44.45	11	44.00
See some regularly	5	31.25	1	11.11	6	24.00
Close friends with quite a few	1	6.25	0	0.00	1	4.00
Total responses	16	100.00	9	100.00	25	100.00
No response	2		2		4	
Information not available	0		0		0	
Total N	18		11		29	

Table 103

EMPLOYMENT OF MOTHER OF HIGH GROUP SUBJECTS ACCORDING TO AGE OF SUBJECT

Response	Male		Female		Both	
	N	%	N	%	N	%
Not employed	14	87.50	3	37.50	17	70.83
Yes, before the subject was 6 years old	0	0.00	1	12.50	1	4.17
Yes, when the subject was 6 - 11 years old	1	6.25	2	25.00	3	12.50
Yes, started when subject was 12 - 18 years old	1	6.25	2	25.00	3	12.50
Yes, started after subject was 18 years old	0	0.00	0	0.00	0	0.00
Mother was dead or absent from home	0	0.00	0	0.00	0	0.00
Total responses	16	100.00	8	100.00	24	100.00
No response	2		3		5	
Information not available	0		0		0	
Total N	18		11		29	

Table 104

AGE AT TIME OF MARRIAGE OF HIGH GROUP SUBJECTS

Age	Male		Female		Both	
	N	%	N	%	N	%
Less than 18 years old	1	6.66	1	10.00	2	8.00
18 - 20 years old	1	6.66	3	30.00	4	16.00
21 - 25 years old	4	26.67	4	40.00	8	32.00
26 - 30 years	4	26.67	1	10.00	5	20.00
Over 31 years old	4	26.67	0	0.00	4	16.00
Not married	1	6.67	1	10.00	2	8.00
Total responses	15	100.00	10	100.00	25	100.00
No response	3		1		4	
Information not available	0		0		0	
Total N	18		11		29	

Table 105

PARENTS' FEELINGS ON SUBJECT OF LIFE WORK OF HIGH GROUP SUBJECTS

Response	Male		Female		Both	
	N	%	N	%	N	%
Had strong feelings and outlined their desires	6	37.50	2	25.00	8	33.33
Were interested and helped subject decide	2	12.50	2	25.00	4	16.67
Were interested but did not understand subject's desires	5	31.25	3	37.50	8	33.33
Actively opposed subject's choice	0	0.00	0	0.00	0	0.00
Showed little or no interest or response	3	18.75	1	12.50	4	16.67
Total responses	16	100.00	8	100.00	24	100.00
No response	2		3		5	
Information not available	0		0		0	
Total N	18		11		29	

Table 106

AGE OF HIGH GROUP SUBJECTS WHEN FIRST PAYING JOB WAS HELD

Age	Male		Female		Both	
	N	%	N	%	N	%
Younger than 14 years	3	18.75	1	12.50	4	16.67
14 - 16 years	8	50.00	4	50.00	12	50.00
17 - 19 years	2	12.50	3	37.50	5	20.83
20 - 22 years	2	12.50	0	0.00	2	8.33
Over 22 years	1	6.25	0	0.00	1	4.17
Never worked	0	0.00	0	0.00	0	0.00
Total responses	16	100.00	8	100.00	24	100.00
No response	2		3		5	
Information not available	0		0		0	
Total N	18		11		29	

Table 107

JOB SKILLS WERE PRIMARILY LEARNED FOR HIGH GROUP

Response	Male		Female		Both	
	N	%	N	%	N	%
School vocational training program	4	25.00	1	12.50	5	20.83
From parents or relatives	0	0.00	0	0.00	0	0.00
On the job	11	68.75	5	62.50	16	66.67
In the military	0	0.00	0	0.00	0	0.00
Somewhere else	1	6.25	2	25.00	3	12.50
Total responses	16	100.00	8	100.00	24	100.00
No response	2		3		5	
Information not available	0		0		0	
Total N	18		11		29	

Table 108

TYPE OF WORK PREFERRED BY HIGH GROUP SUBJECTS

Type	Male		Female		Both	
	N	%	N	%	N	%
Indoor	10	62.50	4	66.67	14	63.64
Outdoor	6	37.50	2	33.33	8	36.36
No preference	0	0.00	0	0.00	0	0.00
Total responses	16	100.00	6	100.00	22	100.00
No response	2		5		7	
Information not available	0		0		0	
Total N	18		11		29	

Table 109

AMOUNT OF PART-TIME WORK WHILE IN SCHOOL OF HIGH GROUP SUBJECTS

Amount of time	Male		Female		Both	
	N	%	N	%	N	%
Worked most of hours out of school	4	25.00	1	11.12	5	20.00
Worked regularly in out-of-school hours but saved time for study and recreation	3	18.75	0	0.00	3	12.00
Worked only occasionally in out-of-school hours	5	31.25	4	44.44	9	36.00
Almost never worked	4	25.00	4	44.44	8	32.00
Total responses	16	100.00	9	100.00	25	100.00
No response	2		2		4	
Information not available	0		0		0	
Total N	18		11		29	

Table 110

TYPE OF WORK PREFERRED BY HIGH GROUP SUBJECTS
(PHYSICAL vs. MENTAL)

Type	Male		Female		Both	
	N	%	N	%	N	%
Physical	3	18.75	3	42.86	6	26.09
Mental	13	81.25	4	57.14	17	73.91
No preference	0	0.00	0	0.00	0	0.00
Total responses	16	100.00	7	100.00	23	100.00
No response	2		4		6	
Information not available	0		0		0	
Total N	0		0		0	

Table 111

TYPE OF WORK PREFERRED BY HIGH GROUP SUBJECTS
(WITH PEOPLE vs. THINGS)

Type	Male		Female		Both	
	N	%	N	%	N	%
With people	11	68.75	4	50.00	15	62.50
With things	5	31.25	4	50.00	9	37.50
No preference	0	0.00	0	0.00	0	0.00
Total responses	16	100.00	8	100.00	24	100.00
No response	2		3		5	
Information not available	0		0		0	
Total N	18		11		29	

Table 112

FATHER'S OCCUPATION OF HIGH GROUP SUBJECTS

Occupation	Male		Female		Both	
	N	%	N	%	N	%
Unskilled labor	6	33.33	2	18.18	8	27.58
Semi-skilled labor	1	5.55	3	27.27	4	13.79
Skilled labor	3	16.67	1	9.09	4	13.79
Office worker	0	0.00	0	0.00	0	0.00
Businessman	5	27.78	2	18.19	7	24.13
Professional man	3	16.67	3	27.27	6	20.68
Total responses	18	100.00	11	100.00	29	100.00
No response	0		0		0	
Information not available	0		0		0	
Total N	18		11		29	

Table 113

VARIABILITY IN LIFE WORK OF HIGH GROUP SUBJECTS

Degree of change	Male		Female		Both	
	N	%	N	%	N	%
Worked at same job without much change since leaving school	7	38.89	4	57.14	11	44.00
Changed jobs occasionally but remained in same occupation	1	5.56	0	0.00	1	4.00
Tried several different occupations	6	33.33	2	28.57	8	32.00
Worked at one occupation most of time with occasional periods at some other	4	22.22	1	14.29	5	20.00
Total responses	18	100.00	7	100.00	25	100.00
No response	0		4		4	
Information not available	0		0		0	
Total N	18		11		29	

Table 114

YEARS OF FORMAL SCHOOLING COMPLETED BY HIGH GROUP SUBJECTS

Years	Male		Female		Both	
	N	%	N	%	N	%
Jr. High School or less	1	5.56	0	0.00	1	3.57
Some high school but not graduated	1	5.56	3	30.00	4	14.29
Graduated from high school	6	33.33	2	30.00	8	28.57
High school and some college	6	33.33	0	0.00	6	21.43
Graduated from college or more	4	22.22	5	50.00	9	32.14
Total responses	18	100.00	10	100.00	28	100.00
No response	0		1		1	
Information not available	0		0		0	
Total N	18		11		29	

Table 115

FEELING ABOUT SCHOOL WHILE GROWING UP - HIGH GROUP SUBJECTS

Feelings	Male		Female		Both	
	N	%	N	%	N	%
Liked it	1	6.67	4	44.45	5	20.83
Liked it most of the time	9	60.00	2	22.22	11	45.83
Just accepted it as necessary	2	13.33	2	22.22	4	16.67
Often a little unhappy about it	3	20.00	0	0.00	3	12.50
Really disliked it and was happy to get out	0	0.00	1	11.11	1	4.17
Total responses	15	100.00	9	100.00	24	100.00
No response	3		2		5	
Information not available	0		0		0	
Total N	18		11		29	

Table 116

NUMBER OF PERSONS DEPENDENT FOR SUPPORT ON HIGH GROUP SUBJECTS

Number	Male		Female		Both	
	N	%	N	%	N	%
None	3	17.65	4	44.45	7	26.92
1	2	11.76	3	33.33	5	19.23
2 or 3	11	64.71	0	0.00	11	42.30
4 or 5	1	5.88	1	11.11	2	7.70
More than 5	0	0.00	1	11.11	1	3.85
Total responses	17	100.00	9	100.00	26	100.00
No response	1		2		3	
Information not available	0		0		0	
Total N	18		11		29	

Table 117

LEVEL OF EDUCATION OF SPOUSE OF HIGH GROUP SUBJECTS

Level	Male		Female		Both	
	N	%	N	%	N	%
Did not finish grammar school	0	0.00	0	0.00	0	0.00
Finished grammar school but not high school	2	15.38	1	9.09	3	13.00
Finished high school	5	38.46	2	18.18	7	30.43
Had some college work	5	38.46	2	18.18	7	30.43
Completed college	1	7.70	5	45.46	6	26.09
Total responses	13	100.00	10	100.00	23	100.00
No response	3		0		3	
Not married	2		1		3	
Information not available	0		0		0	
Total N	18		11		29	

Table 113

SELF-EVALUATION OF PERIOD OF MOST EFFICIENT PERFORMANCE OF HIGH GROUP

Time	Male		Female		Both	
	N	%	N	%	N	%
Sometime in past	2	12.50	2	25.00	4	16.67
About now	10	62.50	3	37.50	13	54.16
Sometime in future	1	6.25	1	12.50	2	8.33
Doubt there is "peak period"	2	12.50	2	25.00	4	16.67
Can't be sure	1	6.25	0	0.00	1	4.17
Total responses	16	100.00	8	100.00	24	100.00
No response	2		3		5	
Information not available	0		0		0	
Total N	18		11		29	

Table 119

AMOUNT OF OUT-OF-STATE TRAVEL OF HIGH GROUP SUBJECTS

Amount	Male		Female		Both	
	N	%	N	%	N	%
Very little	1	6.25	1	11.11	2	8.00
A moderate amount	9	56.25	5	55.56	14	56.00
Great deal	6	37.50	3	33.33	9	36.00
Total responses	16	100.00	9	100.00	25	100.00
No response	2		2		4	
Information not available	0		0		0	
Total N	18		11		29	

Table 120

MOBILITY IN LAST TEN YEARS OF HIGH GROUP SUBJECTS

Lived in	Male		Female		Both	
	N	%	N	%	N	%
One home	14	77.78	8	80.00	22	78.57
Several homes in one city	4	22.22	1	10.00	5	17.86
Two cities	0	0.00	1	10.00	1	3.57
Three to five cities	0	0.00	0	0.00	0	0.00
More than five cities	0	0.00	0	0.00	0	0.00
Total responses	18	100.00	10	100.00	28	100.00
No response	0		1		1	
Information not available	0		0		0	
Total N	18		11		29	